

#### Quarterly Activities Report - December 2017

11 January 2018

#### HIGHLIGHTS

Record revenue per tonne sold of US\$323, producing a revenue to cost ratio of 2.9.

- Significant zircon price increases achieved, and further price increase locked in for contracted March quarter sales.
- <sup>1</sup> Net debt further reduced by US\$21.0 million to US\$65.6 million.

Increase in FY2018 production guidance for ilmenite and zircon.

No lost time injuries.

Agreement reached for acquisition of the world-class Toliara Sands Project in Madagascar.

A\$100 million capital raise to fund the initial US\$75 million purchase consideration for the Toliara Sands Project.

Corporate revolving credit facility established to provide funding for progression of the Toliara Sands Project pre-development activities.

African mineral sands producer, **Base Resources Limited** (ASX & AIM: BSE) (**Base Resources** or the **Company**) is pleased to provide a quarterly corporate and operational update for its Kwale Mineral Sands Operations (**Kwale Operations**) in Kenya. Corporately, the key development was the transformational acquisition of the Toliara Sands Project and associated capital raising. Operationally, the quarter was characterised by consistent production and continuing improvement in zircon markets, variable ilmenite prices and a positive outlook for rutile. The strong performance of Kwale Operations continues to result in significant cash flow generation, driving the rapid reduction in net debt and, in the future, providing substantial funding for development of the Toliara Sands Project.

## KWALE OPERATIONS

PRODUCTION	Dec 2016	Mar 2017	June 2017	Sept 2017	Dec 2017
& SALES	Quarter	Quarter	Quarter	Quarter	Quarter
Production (tonnes)					
Ilmenite	113,806	112,368	119,364	119,376	119,209
Rutile	22,870	23,107	22,762	22,789	22,798
Zircon	8,591	8,212	8,375	9,136	9,569
Zircon low grade <sup>1</sup>	2,550	2,474	3,026	1,425	-
Sales (tonnes)					
Ilmenite	97,047	122,783	142,405	106,260	119,554
Rutile	19,773	21,416	27,779	12,594	25,377
Zircon	9,432	8,069	8,540	9,283	8,144
Zircon low grade <sup>1</sup>	3,397	3,059	3,045	_	3,287

Mined tonnage was down slightly at 2.9 million tonnes (Mt) (from 3.0Mt last quarter) being impacted by shutdowns to allow employees to vote during the recent Kenyan presidential elections, Kwale Phase 2 (KP2) project tie in work and a short

<sup>&</sup>lt;sup>1</sup> Zircon low grade tonnes contained in concentrate, equivalent to approximately 70-80% of the value of primary zircon.

period of abnormally heavy rainfall. Ore grade fell to 7.6% Heavy Mineral (HM) (8.0% HM last quarter) as mining proceeds around the north-western fringes of the Central Dune orebody.

Hydraulic mining unit (HMU) tonnes mined increased from 1.15Mt to 1.21Mt for the quarter, despite a move to a new mining block, which was interrupted and extended by abnormally heavy rainfall in November. Dozer mining unit (DMU) tonnes mined were reduced from 1.87Mt to 1.67Mt.

MINING & WCP	Dec 2016	Mar 2017	June 2017	Sept 2017	Dec 2017
PERFORMANCE	Quarter	Quarter	Quarter	Quarter	Quarter
Ore mined (tonnes)	3,049,333	2,664,738	2,975,694	3,023,550	2,882,529
HM %	5.83	6.70	8.40	8.01	7.61
HMC produced (tonnes)	152,259	159,379	232,574	238,580	196,725

Wet concentrator plant (WCP) heavy mineral concentrate (HMC) production for the quarter fell from 239kt to 197kt whilst HMC stocks increased slightly from 132kt to 138kt. The reduction in HMC production was attributable to the lower mined ore tonnes and grade. Current HMC inventory is more than sufficient to ensure uninterrupted Mineral Separation Plant (MSP) feed during the final implementation stage of the KP2 Project, where a one month shut of the WCP is scheduled in the March quarter to tie in plant modifications and equipment upgrades.

The tailings storage facility (**TSF**) sand wall stacking, lining and slimes deposition continued according to plan, with the final wall lift progressing well. Once this lift is complete, sand stacking will move to the mined-out area of the Central Dune representing the start of rehabilitation in this section. Rehabilitation of the TSF outer wall continued during the quarter.

Good rainfall of 427mm was received during the quarter, resulting in the Mukurumudzi Dam being at 97% of capacity by the end of December. Total rainfall for the 2017 year was 1,350mm or 98% of average.

MSP PERFORMANCE		Dec 2016	Mar 2017	June 2017	Sept 2017	Dec 2017
A		Quarter	Quarter	Quarter	Quarter	Quarter
(U	MSP Feed (tonnes of HMC)	191,576	186,814	192,432	190,499	190,798
2	MSP feed rate (tph)	91	91	92	91	91
A	MSP recovery %					
U	Ilmenite	99	101	101	100	100
P	Rutile	98	99	98	100	100
2	Zircon	73	74	73	75	77

The MSP availability remained steady at 95% with a total of 190.8kt of HMC processed (190.5kt last quarter).

Rutile production and recoveries were consistent with the prior quarter at 22.8kt and 100%<sup>2</sup> respectively.

Imenite recoveries were steady at 100% and production was marginally down to 119.2kt (119.4kt last quarter) due to slightly lower contained ilmenite in the feed.

Zircon production increased to 9.6kt (9.1kt last quarter) due to recoveries increasing to 77% (75% last quarter) with the benefit of process optimisation and circuit changes carried out during the September quarter.

Due to depletion of the zircon tails feed stockpile during the September quarter, no further zircon low grade will be

<sup>&</sup>lt;sup>2</sup> The presence of altered ilmenite species that are not defined as either "rutile" or "ilmenite" in the Resource but are recovered in the production of both, results in calculated recoveries above 100% being achievable for both products.

produced in FY2018. Zircon tails are currently being stockpiled, albeit at a much lower rate and quality due to ongoing recovery improvements in the primary zircon circuit. The resumption of zircon low grade production will be subject to building a zircon tails stockpile of sufficient size and grade to allow economic processing.

Bulk loading operations at Base Resources' Likoni Port facility continued to run smoothly, dispatching more than 142kt of ilmenite and rutile during the quarter (116kt last quarter). Containerised shipments of rutile and zircon through the Mombasa Port proceeded according to plan.

SUMMARY OF UNIT COSTS & REVENUE PER TONNE (US\$)	Dec 2016 Quarter	Mar 2017 Quarter	June 2017 Quarter	Sept 2017 Quarter	Dec 2017 Quarter
Unit operating costs per tonne produced	\$84	\$87	\$96	\$90	\$92
Unit cost of goods sold per tonne sold	\$106	\$111	\$103	\$102	\$113
Unit revenue per tonne of product sold	\$250	\$258	\$297	\$271	\$323
Revenue:Cost of goods sold ratio	2.4	2.3	2.9	2.7	2.9

Total operating costs were in line with last quarter but, due to the absence of low grade zircon production, overall production volumes were marginally lower, resulting in a slightly higher unit operating cost of US\$92 per tonne produced (rutile, ilmenite, zircon and zircon low grade) (US\$90 per tonne last quarter). Cost of goods sold of US\$113 per tonne sold (operating costs, adjusted for stockpile movements, and royalties) were higher than last quarter due to product sales mix and the associated cost allocation.

Revenue per tonne of product sold varies significantly each quarter, with the number of bulk rutile sales during that quarter being the primary factor. In a normal year, there are usually seven or eight bulk rutile sales of approximately 10kt each, which means any given quarter will typically contain either one or two of these sales. As annual rutile sales account for approximately 40% of revenue but only 15% of volume, the number of bulk rutile sales in a quarter has a significant bearing on revenue, but not sales volume. The December quarter had two bulk rutile sales taking total rutile sales to 25.4kt, higher than the prior quarter's 12.6kt total rutile sales due to shipment timing. When combined with the higher zircon prices achieved in the quarter, the average revenue per tonne increased to a record US\$323 per tonne (US\$271 last quarter).

#### KWALE PHASE 2 MINE OPTIMISATION PROJECT

To counter declining ore grades expected from mid-2018 onwards, and to fully exploit the increase in MSP capacity now available, the Board approved, in May 2017, the implementation of the KP2 Project (refer to the announcement on 23<sup>rd</sup> May 2017<sup>3</sup>).

The KP2 Project aims to maximise HMC feed to the MSP, and therefore maintain final production volumes at around current levels for the remaining life of mine, by increasing mining rates as ore grade declines. This will be achieved through increasing the hydraulic mining capacity to three 800tph HMUs, while gradually phasing out the existing DMU. The combined mining rate will therefore increase to 2,400tph, representing an uplift of 60% compared to the 1,500tph achieved in the current quarter. The WCP and water supply infrastructure are being upgraded in parallel to accommodate the higher mining rates.

Construction is on track for completion in the June quarter of 2018 and on budget, with expenditure to date of US\$15.8 million (against a budget of US\$25.3 million), including US\$9.1 million this quarter. The implementation schedule

<sup>&</sup>lt;sup>3</sup> Refer to Base Resources' market announcement "Board approves Kwale Phase 2 mine optimisation project to deliver enhanced economics" released on 23<sup>rd</sup> May 2017, which is available at http://www.baseresources.com.au/investor-centre/asx-releases.

will see the second and third 800tph HMUs commissioned in the June quarter of 2018. The three HMUs will ramp up to full capacity through the course of 2018, with the DMU gradually being phased out over the same period.

Engineering and design work for the transition of mining from the Central Dune to the South Dune will commence in mid-2018, with construction completion scheduled for the second half of 2019.

FY2018 PRODUCTION GUIDANCE	Previous FY2018	New FY2018
	Guidance Range	Guidance Range
Rutile (tonnes)	88,000 to 94,000	no change
Imenite (tonnes)	420,000 to 450,000	450,000 to 480,000
Zircon (tonnes)	33,000 to 38,000	35,000 to 40,000
Zircon contained in zircon low grade (tonnes)	1,500 to 2,500	1,425 <sup>4</sup>

Imenite guidance has increased due to the higher contained ilmenite in the ore associated with mining around the northwestern fringes of the Central Dune, which will continue for the remainder of FY2018. This part of the orebody has lower drilling and sample density due to steep slopes and heavy vegetation resulting in restricted access during exploration drilling.

The above production guidance is based on the following assumptions for FY2018:

- Mining of 10.9Mt (previously 10.6Mt) at an average HM grade of 7.28% (previously 7.50%), with mining for the remainder of FY2018 all from Ore Reserves<sup>5</sup>.
- MSP feed rate at an average of 91tph, consistent with recent performance.
- MSP product recoveries of 100% for ilmenite and 100% for rutile (previously 99%), and 77% for zircon, consistent with recent performance.

#### MARKETING

The global TiO<sub>2</sub> pigment industry remained buoyant through the December quarter. High plant utilisation rates and low inventory levels among the major western pigment producers have continued to support a strong pigment pricing environment. Chinese pigment prices stabilised following some volatility through the September quarter and the early part of the December quarter. Restrictions to Chinese pigment production, caused by government environmental inspections and a gas shortage, helped underpin pigment prices and off-set the impact of the usual seasonal slowdown in pigment demand through the northern hemisphere winter.

After experiencing price increases for ilmenite sales to Chinese customers in the early part of the quarter, the restricted pigment production and seasonal slowdown has seen prices soften towards the end of the quarter. Chinese domestic ilmenite production has gradually increased through the quarter following a sharp decrease in July and August on the back of central government environmental inspections. This has been offset by decreasing ilmenite supply into China from Vietnam over the past two quarters as export quotas from the Vietnamese government were exhausted.

The combination of increased Chinese production, a possible increase in Vietnamese ilmenite supply (as export quotas resume and the restart of mining, if economically viable) and the seasonally weak demand is expected to restrain prices of

<sup>&</sup>lt;sup>4</sup> No further production of zircon low grade is anticipated for FY2018.

<sup>&</sup>lt;sup>5</sup> The Ore Reserves estimates underpinning the above production targets were prepared by Competent Persons in accordance with the JORC Code (2012 edition). The above production targets are the result of detailed studies based on the actual performance of the Kwale mine and processing plant. These studies include the assessment of mining, metallurgical, ore processing, environmental and economic factors.

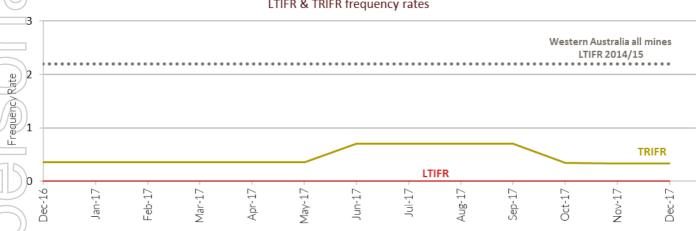
ilmenite sales to China in the short term. Ilmenite demand for pigment production is expected to increase as the Chinese gas shortages ease and the seasonal demand picks up during the June quarter.

A supply deficit in the high-grade feedstock sector (which includes rutile), driven mostly by the strength in the western chloride pigment sector, is resulting in continued upward price momentum. It is expected that this will translate into significant price gains when offtake contracts are renewed in 2018 for bulk rutile and chloride slag sales to large mainstream customers.

Zircon demand remained firm through the quarter with enquiries and volumes requested from customers continuing to exceed the Company's capacity to supply. Lower than anticipated global zircon supply throughout calendar year 2017, and indications of ongoing tight supply through 2018, have supported continuing significant zircon price increases. Base Resources has again secured significant price gains on zircon contracts for the March quarter. While potential exists for further price growth during the coming quarters, emerging concerns from zircon producers over the potential for substitution or thrifting of zircon may begin to restrain the extent and/or frequency of any such increases.

# SAFETY

With no serious injuries occurring during the quarter, Kwale Operations' lost time injury frequency rate (LTIFR) remains at zero. Base Resources' employees and contractors have now worked 11.0 million man-hours LTI free, with the last LTI recorded in the March quarter of 2014. With only one minor injury occurring in the past 12 months, the total recordable injury frequency rate (TRIFR) has fallen to 0.3 per 1 million man-hours worked.



#### LTIFR & TRIFR frequency rates

#### COMMUNITY AND ENVIRONMENT

Agricultural livelihood programs, run in conjunction with partners Business for Development, DEG, FMO, Australia's DFAT and Kenya Red Cross, continue to develop with encouraging support from both national and county Kenyan governments. These programs, covering cotton, potato, sorghum, bee keeping and poultry, now involve around 900 smallholder farmers and community groups, with the ultimate aim being to establish new agricultural opportunities that will provide economic growth well beyond the life of mining activities.

Farmer incomes have benefited from the recent sorghum harvest and commercial sale. Product quality tests run by a large local brewing company proved the grain was ideal for their purposes and, through the farmers' cooperative, the brewery purchased the entire crop. The next planting season is already underway with an expanded number of farmers participating.

Farmers involved in cotton growing in 2017 are harvesting their crop and ginning has commenced. The lint will be exported

to Bangladesh for further processing into garments for multinational clothing retailer, Cotton On. A number of products made exclusively from 100% Kenyan cotton will be on sale within the next quarter.

Following completion of rehabilitation trials, a preferred methodology has been selected and is being rolled out on the TSF walls with encouraging results. Areas planted earlier in April 2017 are now covered in waist high vegetation, providing for successful stabilisation of TSF slopes and developing improved soil nutrient loads. Irrigation has been installed to ensure sustainability as the dry season approaches. Local women's groups have continued to provide materials and labour, injecting significant incomes into villages surrounding the mine site.

# BUSINESS DEVELOPMENT

#### TOLIARA SANDS PROJECT ACQUISITION

On 19 December 2017<sup>6</sup>, Base Resources announced that it reached agreement with World Titane Holdings Ltd (**World Titane**) whereby Base Resources will acquire an initial 85% interest in the wholly owned Mauritian subsidiaries of World Titane, which between them hold a 100% interest in the Toliara Sands Project in Madagascar (held through wholly owned subsidiaries in Madagascar). Base Resources will acquire the remaining 15% interest, with a further US\$17 million payable on achievement of key milestones, as the project advances to mine development.

The Toliara Sands Project is considered by Base Resources to be one of the best mineral sands development projects in the world. It is underpinned by the Ranobe deposit which has a JORC 2012 Mineral Resource of 857Mt at 6.2% heavy mineral, including 612Mt at 6.7% heavy mineral in the Measured and Indicated Categories.<sup>7</sup>

Building on the work completed to date, Base Resources' development plan is to complete a full study phase ahead of a decision to proceed to construction in the second half of calendar 2019. This timetable could be expected to see the Toliara Sands Project in production in mid-2021.

The acquisition is to be funded by the A\$100 million share offer currently underway, refer below for further details.

Completion of the acquisition is expected to occur in late January 2018.

#### **EXTENSIONAL EXPLORATION - KENYA**

As announced on 4<sup>th</sup> October 2017<sup>8</sup>, an updated Mineral Resource estimate for the Kwale South Dune (the **2017 Kwale South Dune Mineral Resource**) has been completed, resulting in a 19% increase in contained in situ HM in the Measured and Indicated categories. An updated Ore Reserve based on the expanded South Dune Resource will be completed in 2018. The next phase of extensional exploration drilling at Kwale Operations is anticipated to commence in the June quarter in the North-East Sector, adjacent to the Kwale Central Dune.

<sup>&</sup>lt;sup>6</sup> Refer to Base Resources' market announcement "Transformational Acquisition of the Toliara Sands Project and A\$100 million share offer" released on 19 December 2017, which is available at http://www.baseresources.com.au/investor-centre/asx-releases.

<sup>&</sup>lt;sup>1</sup>ZRefer to Base Resources' market announcement "Investor Presentation - Acquisition and Entitlement Offer" released on 19 December 2017, which is available at http://www.baseresources.com.au/investor-centre/asx-releases, which contains the JORC competent persons statement for this estimate of Mineral Resource. The Company confirms that it is not aware of any new information or data that materially affects the information included in that announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimates in that announcement continue to apply and have not materially changed.

<sup>&</sup>lt;sup>8</sup> Refer to Base Resources market announcement "Mineral Resource Increase for Kwale South Dune" released on 4 October 2017, which is available at <u>http://www.baseresources.com.au/investor-centre/asx-releases</u>, which contains the JORC competent persons statement for this estimate of Mineral Resource. The Company confirms that it is not aware of any new information or data that materially affects the information included in this ASX announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimates in this announcement continue to apply and have not materially changed.

#### **EXPLORATION - TANZANIA**

The Company holds five prospecting licences in northern Tanzania with a combined area of 475km<sup>2</sup>. A preliminary drilling programme across all five licences is scheduled to commence in late-January 2018.

Total exploration expenditure for the quarter, across all licences in Kenya and Tanzania, was US\$20,000.

## CORPORATE

#### A\$100 MILLION SHARE OFFER TO FUND ACQUISITION OF TOLIARA SANDS PROJECT

On 19 December 2017<sup>6</sup>, Base Resources launched a partially underwritten combined share placement to institutional investors and a 1 for 3 accelerated pro rata renounceable entitlements offer (**Offer**) at a price of A\$0.255 per share.

The Offer comprised the following:

a placement of approximately 143.1 million fully paid ordinary shares to raise approximately A\$36.5 million (**Placement**); and

an accelerated pro rata renounceable entitlements offer of approximately 249.1 million fully paid ordinary share to raise approximately A\$63.5 million (**Entitlement Offer**).

The Entitlement Offer comprises two components:

an accelerated entitlement offer to existing eligible institutional shareholders of Base Resources (Institutional Entitlement Offer); and

an entitlement offer to existing eligible retail shareholders of Base Resources (**Retail Entitlement Offer**), which includes the ability for eligible retail shareholders to trade their retail entitlements on market on ASX.

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The Placement and Institutional Entitlement Offer were successfully completed on 5 January 2018, raising gross proceeds of approximately A\$89.3 million from the issue of 350,074,625 new fully paid new shares. The Company's top five shareholders as at 10 January 2018 were:

#### TOP 5 SHAREHOLDERS

Š	I OF 5 SHAREHOEDERS	Interest Held
2	Pacific Road Capital	22.1%
(	Sustainable Capital	15.4%
	Regal Funds Management	11.3%
2	M&G Investment Management	6.3%
$\overline{\alpha}$	Bank of America Corporation	5.4%

The Retail Entitlement Offer opened on Thursday, 28 December 2017 and is scheduled to close on 17 January 2018.

The funds raised from the Offer will be used to fund the US\$75 million initial consideration for the acquisition of the Toliara Sands Project.

## CORPORATE REVOVLVING CREDIT FACILITY ESTABLISHED

During the quarter, a US\$25 million revolving credit facility (**RCF**) was established to provide Base Resources with additional funding flexibility. Both Base Resources and Base Titanium Limited (owner of Kwale Operations) are eligible borrowers under the RCF and the RCF benefits from the same security package as the Kwale Project Debt Facility.

The RCF has the following key terms:

- Interest of LIBOR (USD) plus applicable margin of 5.50% on the drawn balance.
- Commitment fee of 2% on any undrawn balance.
- Funds available will reduce to US\$15 million six months prior to loan maturity (30 June 2020).
- No mandatory repayments prior to loan maturity, other than reducing any outstanding balance to US\$15 million six months prior to loan maturity.
- Option to extend the facility by a further US\$5 million to US\$30 million, subject to the consent of all Kwale Project Debt Facility lenders.
- Upfront fee of 1.50% plus loan establishment costs.

On 15 December 2017, as required by the terms of the RCF, Base Resources utilised US\$7.4 million of RCF available funds to repay Kwale Project Debt Facility lenders their portion of the July 2017 cash sweep provided to Base Resources and used to retire the Taurus Debt Facility in 2017.

## KENYAN VAT RECEIVABLE

As previously announced, Base Resources has refund claims for VAT paid in Kenya, relating to both the construction of the Kwale Project and the period since operations commenced, totalling approximately US\$18.4 million at 31 December 2017. These claims are proceeding through the Kenya Revenue Authority process, with refunds of US\$4.4 million received during the quarter (none last quarter). Base Resources is continuing to engage with the Kenyan Treasury and the Kenya Revenue Authority, seeking to expedite the remainder of the refunds.

## In summary, at 31 December 2017:

- Net debt of US\$65.6 million, consisting of:
  - Cash and cash equivalents were US\$23.8 million (unrestricted) and an additional US\$30.9 million (restricted debt service reserve account).
  - o Debt of US\$120.3 million (Kwale Project Debt Facility US\$112.8 million and Corporate RCF US\$7.5 million).
  - 747,193,939 shares on issue (1,097,268,564 shares on issue at 10 January).

• 61,425,061 options (exercise price of A\$0.40, expiring 31 December 2018).

71,281,661 performance rights issued pursuant to the terms of the Base Resources Long Term Incentive Plan.

ENDS.

# CORPORATE PROFILE

Base Resources Limited ABN 88 125 546 910

# DIRECTORS

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