

## Quarterly Activities Report – December 2021

African mineral sands producer, **Base Resources Limited** (ASX & AIM: BSE) (**Base Resources** or the **Company**) is pleased to provide a quarterly operational, development and corporate update.

### KEY POINTS

- Kwale Operations maintained operational consistency through the quarter, in line with FY22 guidance.
- Ongoing strong demand supported further price increases for all products in the quarter.
- Bumamani DFS commenced and on track for completion in the June quarter.
- Tanzanian exploration commenced with 224 shallow auger holes completed.
- Discussions with the Government of Madagascar on Toliara Project fiscal terms continued.

### KWALE OPERATIONS

#### Operational performance

Mining operations continued to plan on the South Dune orebody with mined tonnage decreasing slightly due to planned maintenance shutdowns and lower mining rates. The heavy mineral (**HM**) grade of ore mined in the quarter was higher at 3.82% (last quarter: 3.26%) as mining progressed towards the centre of the South Dune orebody.

Wet concentrator plant (**WCP**) production of heavy mineral concentrate (**HMC**) was higher at 153kt (last quarter: 134kt) as a consequence of the higher ore grade. HMC stocks increased to 23kt (last quarter: 17kt). Sand tails continued to be deposited into the mined-out Central Dune area and capped with a 2m thick co-disposed slimes/sand layer to aid water retention and subsequent rehabilitation and alternate land use. Rehabilitation of the Central Dune slopes and plateau continued to plan and agricultural trials on the co-disposed water retention layer proved successful. Rehabilitation of the mined-out sections of the South Dune proceeded as scheduled.

SUMMARY	Q4 20	Q1 21	Q2 21	Q3 21	Q4 21
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#### Mining (million tonnes)

Ore mined	4.6	4.7	4.7	4.4	<b>4.3</b>
HM %	3.43	3.58	3.65	3.26	<b>3.82</b>
VHM %	2.62	2.80	2.78	2.50	<b>2.94</b>

#### Production (thousand tonnes)

Ilmenite	78.5	84.2	88.7	72.9	<b>84.0</b>
Rutile	18.2	19.5	20.1	17.8	<b>18.4</b>
Zircon	6.7	7.4	7.1	6.1	<b>6.4</b>

Mineral separation plant (**MSP**) feed tonnage of 146kt was higher than the prior quarter (last quarter: 137kt), due to increased HMC feed availability. Production of ilmenite was significantly higher in the quarter due to increased MSP recoveries of 102% (last quarter: 100%) and an elevated proportion of ilmenite in the mineral assemblage. Underlying MSP product recoveries for rutile and zircon were steady and their production was in line with expectations.

SUMMARY	Q4 20	Q1 21	Q2 21	Q3 21	Q4 21
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#### US\$ per tonne

Sales revenue	\$464	\$478	\$497	\$668	<b>\$459</b>
Operating costs	\$161	\$142	\$148	\$174	<b>\$161</b>
Cost of goods sold	\$207	\$169	\$202	\$264	<b>\$156</b>
Revenue: Cost ratio	2.2	2.8	2.5	2.5	<b>2.9</b>

#### Sales (thousand tonnes)

Ilmenite	53.8	97.2	94.0	34.1	<b>130.0</b>
Rutile	12.0	26.1	24.6	13.8	<b>11.6</b>
Zircon	6.4	6.6	7.7	5.6	<b>6.2</b>

Bulk loading operations at Kwale Operations Likoni export facility continued to run smoothly, dispatching a combined 138kt of bulk ilmenite and rutile during the quarter (last quarter: 54kt). Containerised shipments of rutile and zircon through the Mombasa Port proceeded to plan.

Total cash operating costs of US\$18.1 million increased compared to the prior quarter (last quarter at US\$16.9 million) due to higher mining and maintenance costs. However, the increased production volumes resulted in lower unit operating costs of US\$161 per tonne produced (rutile, ilmenite, zircon and low-grade zircon) (last quarter: US\$174 per tonne).

Cost of goods sold decreased to US\$156 per tonne sold (operating costs, adjusted for stockpile movements, and royalties) due to the sales mix (last quarter: US\$264 per tonne), as did average unit revenue of US\$459 per tonne (prior quarter: US\$668 per tonne). Due to these factors, the revenue to cost of goods sold ratio for the quarter increased to 2.9 (last quarter: 2.5).

At the end of the quarter, 100% of Kwale Operations employees had received at least one dose of COVID-19 vaccine, with 76% fully vaccinated. Boosters are scheduled to commence early in 2022.

### **FY22 production guidance**

Kwale Operations production guidance for the 2022 financial year (**FY22**) remains at:

- Rutile - 73,000 to 83,000 tonnes.
- Ilmenite - 310,000 to 340,000 tonnes.
- Zircon - 24,000 to 28,000 tonnes.<sup>1</sup>

### **MARKETING**

Despite uncertainties in China relating to power cuts, environmental controls and COVID management policies, the TiO<sub>2</sub> pigment industry and the main zircon-user sectors (including ceramics) in China remained strong through the December quarter. End user sectors for the Company's products in all other markets continued to strengthen through the quarter. Further price increases for TiO<sub>2</sub> pigment have been announced globally for early 2022.

Demand for imported ilmenite as a feedstock for Chinese TiO<sub>2</sub> pigment producers, particularly from the Company's customers, remained strong in the quarter, enabling further ilmenite price gains. Increased ilmenite supply from some African sources, Vietnamese exports and Chinese domestic production through 2021 continued to lag behind demand resulting in an expectation that ilmenite prices will maintain December levels through the March quarter. Bulk freight costs to China eased through the quarter but remain volatile and are expected to affect ilmenite price gains for the foreseeable future.

Demand for high grade TiO<sub>2</sub> feedstocks (which includes rutile) again increased significantly through the quarter as western TiO<sub>2</sub> pigment producers sought to maximise output volumes and the welding consumable and titanium metal sectors strengthened further. The tight market for high grade feedstocks has been exacerbated by uncertainties over supply from major high grade feedstock producers. Rutile prices increased through the quarter and substantial price increases have been secured for the March quarter. A major rutile shipment scheduled for December 2021 was postponed to January 2022 due to delays with the customer's chartered vessel, impacting reported sales for the December quarter.

Zircon demand continues to be strong in all end use sectors and regions, which, when combined with limited supply and minimal inventories, has resulted in a tightening zircon market and upward price pressure. Zircon prices for the Company's December quarter contracts increased by approximately US\$600/t from prices in September quarter contracts. Due to ongoing uncertainties in China and the seasonally weaker winter period, average zircon pricing agreed for the Company's March quarter contracts have seen only a marginal increase over December quarter contract prices.

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<sup>1</sup> Refer to Base Resources' announcement on 19 October 2021 "Quarterly Activities Report – September 2021" for the assumptions upon which the FY22 production guidance is based.

## SUSTAINABILITY

### Safety

There were no lost time injuries during the quarter, or in the past year, at Kwale Operations or the Toliara Project, resulting in a lost time injury frequency rate (LTIFR) for Base Resources of zero. Compared to the Western Australian All Mines 2019/2020 LTIFR of 2.1, this is an exceptional performance reflective of the ongoing focus and importance placed on safety by management. Base Resources group employees and contractors have now worked 26.9 million hours lost time injury (LTI) free, with the last LTI recorded in early 2014.

With two medical treatment injuries recorded in the last 12 months, Base Resources' total recordable injury frequency rate is 0.50 per million hours worked.

### Community and environment – Kwale Operations

The Company has continued to assist the Kwale community through the COVID-19 pandemic, including by collaborating with county and national health authorities to encourage the uptake of vaccines.

Agricultural livelihood programs in Kwale continued through the PAVI farmers' cooperative, with the arrival of rain in the quarter allowing additional planting to take place. Poultry and beekeeping programs continue to expand and provide farmers and community groups with substantial incomes. Selection of tertiary scholarship recipients was completed during the quarter with 220 awards made.

Implementation of identified projects by the Msambweni, Lunga and Likoni Community Development Agreement Committees commenced in the quarter with considerable progress made on several infrastructure projects.

Rehabilitation activities on the mined-out sections of the South Dune continued in the quarter with community groups supplying indigenous legumes, grass seed and manure. On the Central Dune, 14 hectares began being prepared for additional agricultural trials.

A successful visit by representatives of key government departments and agencies, together with representatives of Kwale County, saw the endorsement of the Company's post-mining land use concepts that will now move into the pre-feasibility study phase.



Image: Progressive land rehabilitation activities on the South Dune.

## Community and environment – Toliara Project

All community training programs, and social infrastructure construction, remained on hold with the Government of Madagascar's suspension of the Toliara Project's on-the-ground activities. However, the Company continued to partner with local governments and community health groups in the Toliara region to provide additional support to vulnerable communities affected by COVID-19, including programs to address food insecurity and hygiene.

## Modern slavery statement

During the quarter, Base Resources published its FY21 modern slavery statement reporting on the Company's actions to identify, assess and address the risks of modern slavery in the Company's operations and supply chains during the period<sup>2</sup>.

## BUSINESS DEVELOPMENT

### Toliara Project development – Madagascar

In November 2019, the Government of Madagascar required the Company to suspend on-the-ground activity on the Toliara Project while discussions on fiscal terms applying to the project were progressed. Activity remains suspended as Base Resources continues to engage with the Government in relation to the country's Large Mining Investment Law (LGIM) regime, fiscal terms applicable to the Toliara Project and lifting of the on-the-ground suspension.

In September 2021, the Company completed an enhanced Definitive Feasibility Study (DFS2) for the Toliara Project to incorporate an update to the estimated Ranobe Ore Reserves and an increase in project scale.<sup>3</sup> The outcomes of DFS2, compared to the earlier 2019 DFS, included substantially improved forecast financial returns for the Toliara Project, including a post-tax/pre-debt (real) NPV<sub>10</sub> of US\$1.0 billion and an average revenue to cost of sales ratio of 3.5, over an initial 38-year mine life.<sup>4</sup> The DFS2 schedule assumes construction will commence at the start of 2023, at a capital cost of US\$520 million, which would see production starting in early 2025. However, timing of the Final Investment Decision (FID) to proceed with construction of the Toliara Project remains subject to lifting of the suspension of on-the-ground activities and agreeing acceptable fiscal terms with the Government of Madagascar. Once these two key milestones are achieved, there will be approximately 11 months' work to complete prior to reaching FID, including finalisation of funding, completion of land acquisition, conclusion of major construction contracts and entering into offtake agreements with customers. Resumption of reasonable international travel will also be required to complete a significant portion of this pre-FID work. The Company maintains readiness to accelerate progress when conditions support.

Total expenditure on the Toliara Project for the quarter was US\$1.2 million (last quarter: US\$2.1 million).

### Kwale mine life extension

The Company is progressing a definitive feasibility study (DFS) on higher grade subsets of the Bumamani and Kwale North Dune deposits to extend Kwale Operations mine life to July 2024. Following a pit optimisation study completed in the quarter, a further Kwale North Dune pit area, referred to as the P200 pit area (in addition to the original P199 pit area), has been included in the DFS, which could further extend Kwale Operations mine life to early Q4 2024. To secure the required mining tenure, an application for a variation to extend the Kwale Special Mining Lease 23 (SML 23) to cover these areas has been lodged. The DFS is expected to be completed in the second quarter of 2022.

### Extensional exploration – Kenya & Tanzania

No further work was conducted on the Vanga Prospecting License (PL/2015/0042) in the quarter and completion of the remaining drill program (4,200 metres) in the North-East Sector (Kwale East) of PL 2018/0119 remains on hold pending community access being secured.

<sup>2</sup> For further information, refer to Base Resources' announcement on 3 December 2021 "Modern Slavery Statement".

<sup>3</sup> For further information, refer to Base Resources' announcement on 27 September 2021 "DFS2 enhances scale and economics of the Toliara Project" (DFS2 Announcement).

<sup>4</sup> Refer to the DFS2 Announcement for the material assumptions and underlying methodologies for deriving these financial outcomes. The DFS2 Announcement also discloses key pre and post FID risks in respect of the Toliara Project. Base Resources confirms that all the material assumptions underpinning the production information and forecast financial information in the DFS2 Announcement continue to apply and have not materially changed.

Prospecting licence applications lodged for an area in the Kuranze region of Kwale county, about 70 km west of Kwale Operations (applications 2019 0260, 2510 and 2512), together with an area south of Lamu (applications 2019 0263, 0265, 0266), remain in process towards granting. An additional prospecting licence application has been lodged for the area surrounded by the Kuranze applications in Kenya, however application numbers and boundaries have not yet been issued. A Government of Kenya moratorium on the issuance of prospecting licences in November 2019 has affected the progress of all licence applications. The Company continues to work with the Government, and other mining sector stakeholders, to see the moratorium lifted to enable the recommencement of the issuance of mineral rights.

The Company progressed on-ground exploration in Tanzania with a shallow auger drilling program completing 224 holes to assess geochemical anomalies and identify air core drilling targets. Sample assaying is in progress at the Kwale Operations mine laboratory with infill auger drilling and test pits planned in the March quarter to better understand the more prospective areas. Subject to the outcomes of assays, as well as drill rig availability, deeper drilling will then be progressed.

Expenditure on exploration activities in Kenya during the quarter was US\$0.2 million (last quarter: US\$0.3 million) and in Tanzania was US\$0.2 million (last quarter: US\$0.1 million).

## **CORPORATE**

### **FY22 interim financial results**

The Company is targeting release of its FY22 interim consolidated financial statements on 28 February 2022. Confirmation of timing and shareholder and investor call details will be advised closer to the planned release.

### **Kwale royalty rate**

As previously announced,<sup>5</sup> in parallel with the extension of SML 23 to incorporate the estimated Kwale South Dune Ore Reserves previously falling outside the SML 23 boundary, Base Titanium Limited, Base Resources' wholly owned Kenyan subsidiary, agreed to royalty rate increases that applied retrospectively. During the quarter, Base Titanium Limited made royalty payments to the Government of Kenya totalling US\$18.8 million comprising the necessary catch-up payments to the June 2021 quarter and payment of the September quarter royalty at the agreed increased rate. Base Titanium Limited also paid corporate tax instalments of US\$7.7 million to the Government of Kenya for the first half of FY22.

As at 31 December 2021, the Company had net cash of US\$37.1 million consisting of:

- Cash and cash equivalents of US\$37.1 million.
- No debt.

As at 31 December 2021, the Company had the following securities on issue:

- 1,178,011,850 fully paid ordinary shares.
- 76,570,331 performance rights pursuant to the terms of the Base Resources Long Term Incentive Plan, comprising:
  - 8,149,202 vested performance rights, which remain subject to exercise<sup>6</sup>.
  - 68,421,129 unvested performance rights subject to performance testing in accordance with their terms of issue.

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### **Forward looking statements**

Certain statements in or in connection with this announcement contain or comprise forward looking statements. Such statements may include, but are not limited to, statements with regard to future production and grades, capital cost, capacity, sales projections and financial performance and may be (but are not necessarily) identified by the use of phrases such as "will", "expect", "anticipate",

<sup>5</sup> For further information, including the agreed increased royalty rates and the periods during which they apply, refer to Base Resources' announcement on 30 September 2021 "Kwale mining lease extension secured and royalty discussion finalised".

<sup>6</sup> Vested performance rights have a nil cash exercise price. Unless exercised beforehand, these rights expire five years after vesting.

“believe” and “envisage”. By their nature, forward looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future and may be outside Base Resources’ control. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in product prices and exchange rates and business and operational risk management. Subject to any continuing obligations under applicable law or relevant stock exchange listing rules, Base Resources undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today’s date or to reflect the occurrence of unanticipated events.

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This release has been authorised by the Board of Base Resources.

#### **About Base Resources**

Base Resources is an Australian based, African focused, mineral sands producer and developer with a track record of project delivery and operational performance. The Company operates the established Kwale Operations in Kenya and is developing the Toliara Project in Madagascar. Base Resources is an ASX and AIM listed company. Further details about Base Resources are available at [www.baseresources.com.au](http://www.baseresources.com.au)