

# Murray Basin Newsletter

## About Iluka

Iluka Resources is involved in the exploration, project development, operations and marketing of mineral sands products. Iluka is a major producer of zircon globally and a large producer of the high-grade titanium dioxide products-rutile and synthetic rutile.



**ILUKA**

## Hamilton Mineral Separation Plant

In October 2017, the Hamilton plant was placed in care and maintenance following a review of the company's processing capacity. A small number of employees remain at site to provide oversight of the plant during this idle period.

Iluka is continuing to evaluate the future of the site and will ensure relevant stakeholders are engaged during this period.

Iluka has continued to transport mineral sands products from the former Wornak, Rownack and Pirro (WRP) mine site near Ouyen to the Port of Portland by trucks. This transport is likely to continue throughout 2019 on an intermittent basis subject to sales demand.

## Rehabilitation

### Douglas & Echo

Ongoing environmental monitoring and rehabilitation activities remain a key focus for the former Douglas and Echo mine sites.

The season has been kind relative to other areas in the state resulting in promising winter/spring crop and pasture production. All rehabilitation areas at Douglas are sown to pasture that are being grazed by sheep with the exception of the southern area of Pit 19 which is sown to barley.

Twenty hectares of the Pit 5 rehabilitated subsoil surface has been sown down to a Winifred rape/millet summer crop to utilise irrigation water from Freshwater Dam. The main aim of this project is to reduce the amount of water in the dam via evaporation through irrigation system thereby reducing the risk of the dam overflowing through seasonal rainfall events.

In addition, two thickener tanks at the Douglas site were recently dismantled and relocated to the Iluka Cataby site in WA.

Assessment of the long term use of Pit 23 is ongoing in accordance with the evaluation of the Hamilton MSP site. The pit continues to be managed in accordance with the regulatory approved environmental management plans. At the Echo site, all rehabilitated areas are being cropped (canola at north, wheat south of White Swamp Road) or grazed (the remaining central area).

### WRP and Kulwin

Topsoil has now been placed on 639ha of the 1,118ha total disturbance area at the former WRP mine site following the completion of 387ha of topsoiling in 2018. Since July, bulk earthworks have focused north of the Calder Highway and this will continue until topsoil placement is completed in April 2019 when we refocus our efforts south of Rownack Road. Minor earthworks are also being undertaken currently to dry and shape the tailings dam surface to post mining design.

Key assets from WRP have been relocated to our mine sites at Jacinth Ambrosia in South Australia and the Cataby site throughout the year, and this work is nearing completion. The remaining mining infrastructure is scheduled for demolition and removal from site in the coming 6 months.

Ilmenite stored within the WRP mine void is being removed periodically in response to market demand.

Rehabilitation earthworks are scheduled to recommence at the former Kulwin mine site early in 2019. Topsoil has previously been placed on 457ha of the 773ha total disturbance at the site and rehabilitation of key native vegetation areas at McBains and Kulwin Bushland Reserve areas has been ongoing.

The Environmental Review Committees for the Douglas and WRP/Kulwin sites continue to meet quarterly as a way of providing information back to stakeholders on the status of each site. Further information on the role of the Committees can be found at [www.earthresources.vic.gov.au](http://www.earthresources.vic.gov.au)

## Projects

### Tenements

Iluka retains significant tenement holdings in the Murray Basin, both in Victoria and New South Wales. Exploration and development work continues on a number of tenements as Iluka continues to evaluate these resources. Engagement with landowners and relevant stakeholders for these programs has commenced, and will be ongoing as development options progress.



### Fine Minerals Project

Iluka has been undertaking assessment of its fine mineral deposits in Victoria for a number of years. The ore within these deposits are characterised by its fine grained nature, which has typically resulted in poor separation efficiency through traditional mineral sands separation processes. The recent completion of a scoping study and subsequent technology development program have focused on the successful application of key processing technologies to enable the project to progress to a feasibility study stage. In Q3 2018 Iluka commenced a pre-feasibility study (PFS) into the development of the fine mineral WIM100 deposit, located approximately 32 kilometres south-west of Horsham and 7.8 kilometres north of the locality of Toolondo. The deposit is located mostly within agricultural land.

The PFS scope includes technical and engineering assessments such that by the end of the study, the mining method, metallurgical process, site infrastructure and project capital cost have been defined to allow progression to a Definitive Feasibility Study.

As part of the initial assessment phase of the project, Iluka has been granted regulatory approval to excavate a test pit in the deposit to bulk sample at least 500 dry tonnes, and potentially up to 1,500 dry tonnes, of ore for further metallurgical test work. The test pit site is located on the east side of the Hamilton-Natimuk Road, approximately 1.4 kilometres north of the Jallumba-Mockinya Road intersection. The ore will be transported to Western Australia where further pilot plant test work is planned in order to produce larger product samples for potential customer assessment.

Additional value propositions are also being investigated whereby certain rare earth mineral products are separated into tradeable commodity form. Rare earth elements are considered a critical input in a number of rapidly evolving markets and industrial and military applications. Typically rare earth minerals are commonly used in permanent magnets, such as electric cars, wind turbines and consumer electronics.

### Balranald

The Balranald project is located in the northern Murray Basin adjacent to the township of Balranald. A drilling program to provide a more detailed understanding of the deposit mineralisation has just been conducted with results expected in 2019. There is a proposed final trial in 2019 for the unconventional mining development process to demonstrate that the technical work packages are effective in a continuing mining and processing environment.



### Stakeholder Perception Survey

During July and August 2018, Iluka engaged KPMG to conduct a stakeholder perception survey across its exploration, project, operations and rehabilitation activities in Australia. KPMG conducted detailed face to face and phone surveys with 163 of Iluka's stakeholders across Western Australia, South Australia, Victoria and New South Wales.

For the Australian activities as a whole, the survey had a number of positive findings, predominantly around a generally positive attitude towards Iluka, our management of environmental factors and recognition of contribution to local communities.

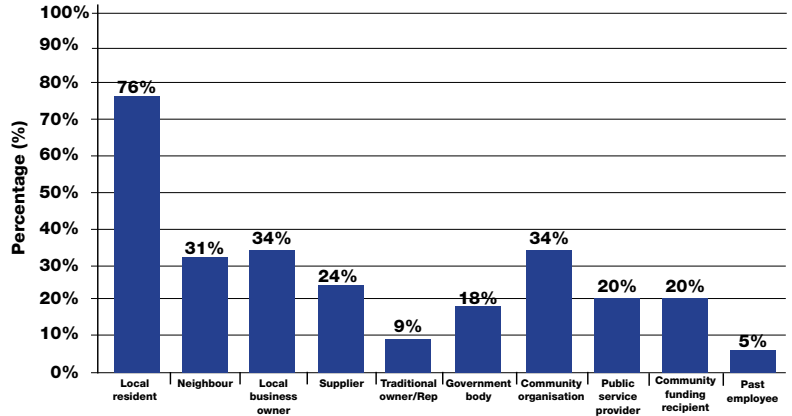
The findings for the Murray Basin region indicated;

- Most stakeholders were still positive about Iluka, but was the lowest of the three regions (Murray, Perth and Eucla Basins) surveyed.
- Stakeholders would like more information about Iluka's plans for the area and what factors influence those plans
- Stakeholders are keen to see Iluka start operations in the region again, especially to provide economic opportunities; and
- There were a range of views regarding the future of Pit 23 at the Douglas site which included concerns around health, environment and governance.

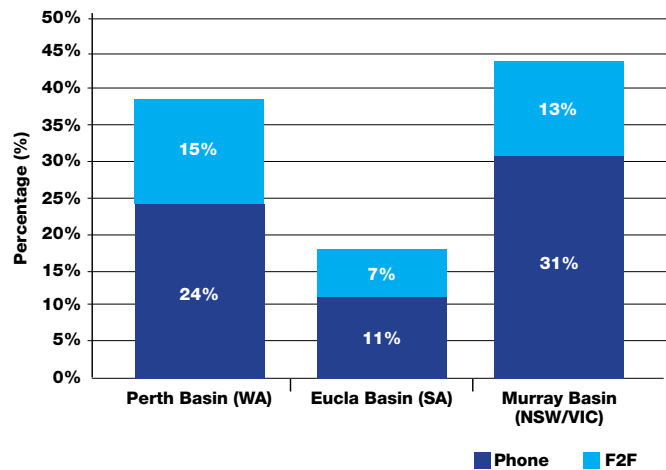
Thank you to those who participated in the survey. Iluka will use the findings to inform our engagement and communication plans for the region going forward.

Further information of any of Iluka's activities can be gained by contacting Iluka's community feedback line 1800 201 113

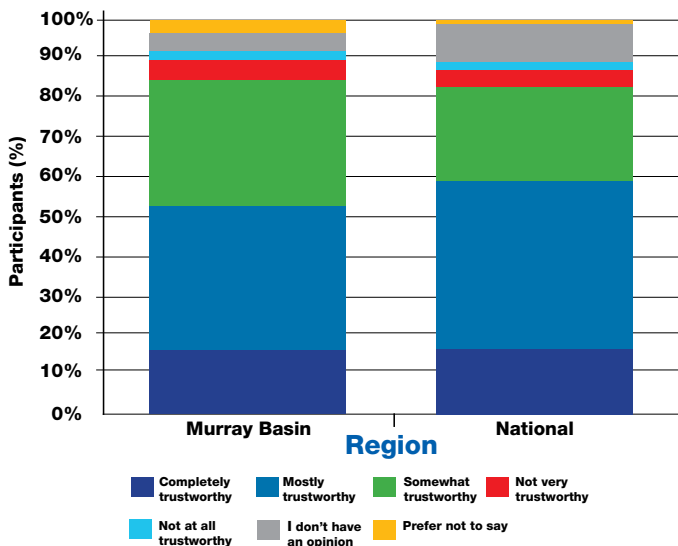
Survey participants by stakeholder group (n=163)



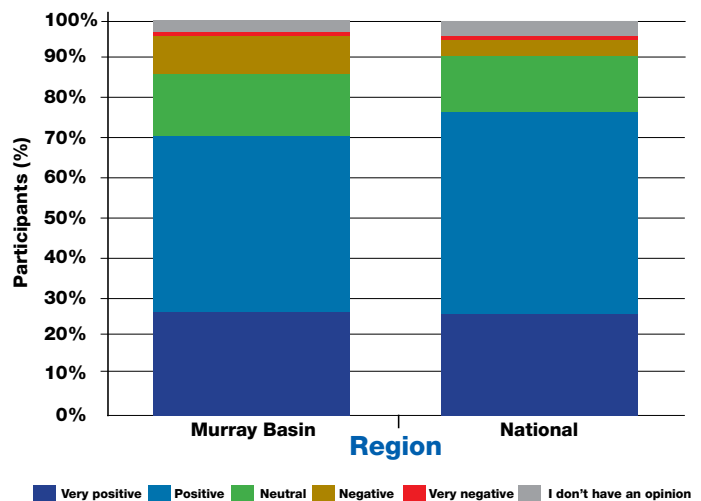
Location of survey participants-by region (n=163)



How trustworthy do you consider Iluka?



What is your overall opinion of Iluka?



### For more information:

Contact the Iluka Community Feedback line on 1800 201 113 for more information about any of our activities.

[www.iluka.com](http://www.iluka.com)