



EXCAVATING A BOLD FUTURE



DIAMANTINA  
LABORATORIES

*in* **2** *Dredging*  
Solutions adding value



# UNEARTHING ELEMENTAL DISCOVERY



RZ Resources explores, discovers and mines a swathe of critical minerals across the Southwest of New South Wales, Australia. Chief Operating Officer, John Costigan explores the spirit of ingenuity and sustainable responsibility alongside aspirations for vast future growth

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The market for rare earth elements and critical minerals is growing exponentially in order to address the increasing demand for products and the pressing global need to drive a more sustainable future.

In Australia, the government understands the importance of critical minerals, including rare earths, and is actively supporting businesses that are entering this swiftly expanding sector. ▣

**DAVID FRASER,  
FOUNDER AND  
MANAGING DIRECTOR –  
MINI PROFILE**

- David Fraser is the Founder and Managing Director of RZ Resources (previously Relentless Resources Limited), incorporating the company in 2012.
- From the outset, Fraser has worked to build a long-term, responsible business, committed to sustainable mining practices and focused on delivering value to the local communities and shareholders.
- Fraser worked for Credit Suisse where he was responsible for growing funds under management (FUM), managing high-net-worth client portfolios and facilitating investment opportunities for other banking divisions. During his tenure at Credit Suisse, Fraser was recognised with an Australian Private Banking award for his outstanding relationship management.
- As the Global Head of Distribution for one of Australia's largest alternative investment companies, Fraser was responsible for developing and raising capital for both domestic and offshore opportunities.
- Fraser started out as the Sydney and Brisbane Director of the Office of Economic Development for the City of Brisbane, where he led investment teams in generating revenue and developing growth opportunities in industry sectors such as mining and resources, infrastructure, and advance manufacturing.



As investors seek alternatives to the fossil fuel sectors, they see immense value in the long-term opportunities presented by the critical minerals sector.

Perfectly positioned to capitalise on such possibilities is RZ Resources, a 100 percent Australian-owned emerging critical minerals producer that is focused on being a highly responsible company, mining and producing critical minerals and rare earths in the far south-western corner of New South Wales (NSW).

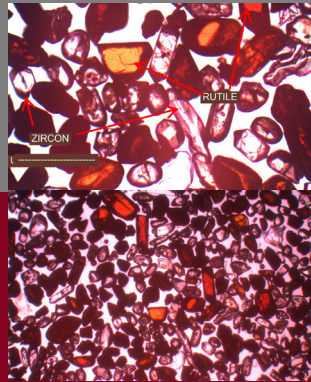
“We are seeing longer-term forecasts for an increasing gap between supply and demand and there is a global focus and demand from consumers for companies to prioritise environmental, social and governance (ESG). RZ Resources understands how important ESG, diversity, equity, and inclusion is to its business strategy,” says John Costigan, recently appointed Chief Operating Officer of RZ Resources.

RZ Resources has an impressive

portfolio of 10 tenements, including the flagship Copi Project, for an exploration area totalling 3,362 km<sup>2</sup> in the mineral sands-rich region of NSW.

Growing up in regional Queensland, Costigan began forging a curiosity from an early age for all things mechanical while he and his brothers dismantled and reassembled old motorcycles. Heavily influenced by his father, his enthusiasm for science and engineering continued to grow, leading to a hugely varied career path.

“I’ve been fortunate in my career to work in technical and leadership roles in varied industries including petroleum, animal health, agricultural chemicals, minerals processing as well as mining. This variety has provided me with core skills and knowledge, allowing me to navigate a career with confidence in more senior roles later in my career,” he describes. “It’s through some hard learned lessons, that I became an advocate of embedding ESG, sustainable development, Indigenous economic



## About Us

**Diamantina Laboratories** was established in 1997 as a specialist mineral sands processing laboratory by Raimunda Townend, a geologist/mineralogist now with over 51 years of international experience.

Diamantina has steadily expanded and grown into a team of skilled, dedicated professionals and technicians, based over two sites.

## Benefits

- High quality service
- Fast turnaround
- Accurate results
- Competitive pricing
- A modern well equipped laboratory
- Secure sample storage

## Services

### **Australia Quarantine**

#### **FULL MINERAL PROCESSING:**

- Percentage: oversize, sand, slime, and heavy mineral
- Deslime, Eg: +2mm +53 microns
- Leaving Sand: -2mm + 53 microns
- Sand fraction to HM (heavy mineral)

#### **Magnetic separation: HS, Mag1, Mag2, NM.**

#### **MINERALOGY:**

##### **1. Qualitative:**

Sachet Logging (Binocular Stereo Microscope)

##### **2. Quantitative:**

- Mineral Identification, point counting and their percentage.
- Polarising Light Microscopy and Stepping Stage point counting
- Transmitted and Reflected light.

##### **2A. Standard:**

- 600 points counting: Study for Exploration Geology
- HS, Mag, N. Mag. Head. Percentage of every mineral present
- Identifying: Opaques Eg: Oxides: Ilmenites, Rutile etc.
- Non-Opaques: Eg: Zircon, Monazite, Xenotime etc.

##### **2B. 900 Point counting:**

- Fully Quantitative study of Composites for Reserve Calculation
- HS, Mag1, Mag2, N. Mag, and Head calculation
- Results in weight percentage



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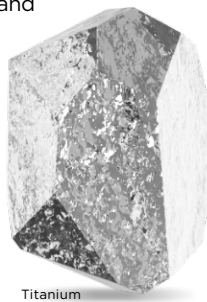


empowerment and community relations. I was previously working at another sand mine in Queensland when it lost its social licence to operate, and it became obvious to me that a company needed to be trusted to resolve issues effectively with the support of its community if it was going to have a whole-of-mine life.”

**FLAGSHIP COPPI PROJECT**

As demand for high quality mineral sands, specifically rutile, zircon and titanium, and rare earth elements continues to increase, RZ Resources has positioned itself optimally to deliver the Copi Project - an undertaking that has the potential to be both company and industry defining.

The Copi Mine is a globally significant resource and will help underpin the growth of Australia’s critical mineral and rare earths industry. ■



Titanium

**ESG LESSONS FOR AN EMERGING BUSINESS**

RZ Resources understands that the path to world-class ESG performance is paved with challenges and opportunities, particularly for a young and emerging company.

“Recently the NSW mining regulator made 22 specific allegations of environmental non-conformance which RZ accepted in an enforceable undertaking. To understand what could be done to prevent any possible future reoccurrence, we commissioned an independent auditor to uncover the root causes of the problem. The two key findings were: ineffective governance and oversight of compliance, resulting in non-compliance with legal obligations and persistence of onsite issues; and insufficient due diligence and inadequate systems to manage exploration practices and stakeholder engagement, which meant we didn’t have sufficient evidence to prove we had met our obligations. The company took immediate corrective actions to address the offences and is now building in preventive systems and governance,” says Costigan.

The founder of RZ, David Fraser, sets the tone for the company. He believes: “RZ has learned a powerful lesson that the company will be judged by its failures unless we learn from the insights gained to drive the changes needed to build a better approach to ESG.”

“I am just so impressed that the company learns from its mistakes. Today we’re proactively undertaking a gap analysis between world-best practices, our stakeholders’ expectations and our performance so we can prioritise a change programme to keep improving our ESG performance. One day I believe we will have world-leading best practices in ESG and sustainable development,” Costigan says.

Founded in 2016, in2Dredging (i2D) is an international and independent dredging consultancy based in Australia and Europe that has extensive experience in dredging and mining environments. The company provides dredging support and delivers innovative solutions to owners, contractors, engineers and suppliers. Since its inception, i2D's commitment to quality and constant development has continued to shape its solid reputation and passion for dredging.



Although dredging and mining both excavate rock and soil, both fields are also very different. Dredging is excavating underwater using cutting and jetting techniques that are more cost-effective in marine environments. Dredging also involves a significant amount of risk since production rates vary depending on the rock and soil strength encountered.

In mining, the risk of subsurface rock is typically relatively low since the rock is first loosened by blasting. Mining projects are set up for decades and rely on custom-built mining dredgers that can be adapted to specific conditions. Since more generic dredgers are needed for the open dredging market, this requires different designs as well as a completely different mindset.

i2D has combined extensive practical field experience with academic knowledge to develop several off-the-shelf dredging tools, such as [Pumps 'n Pipelines](#) and [Estimator For \(E<sub>4</sub>\) Dredgers](#).

The company's integrated management system helps ensure the highest possible quality, safety and flexibility to meet client requirements, deadlines and budgets. A handpicked multi-disciplinary team of accomplished consultants delivers cost-effective, appropriate and robust solutions backed by academic knowledge and vast field experience.

**Management** – i2D can manage all phases of a project, from concept to detailed design, and from tender preparation to execution, both on the owner and contractor side.

**Engineering** – i2D's engineers perform in-house advanced engineering that provides answers to any and all dredging challenges.

**Estimating** – i2D's estimating tools are unique and state of the art, supporting them in producing appropriately defined, reliable and accurate budgets, schedules, designs and specifications.

**Environment** – i2D carries out marine investigations and environmental studies by identifying baseline conditions and calling attention to potential impacts and its mitigations.

**Geodata Processing** – i2D uses pre-invested tools to gain ground-breaking insight into dredging projects and monitor them more quickly and continuously.

**R&D and Innovation** – Cutting-edge research, development and innovation (RD&I) at an academic level helps provide i2D with a solid foundation to generate innovative dredging solutions.





Once operational, the Copi Mine will be one of Australia's largest mineral sands mines developed in recent decades. RZ Resources recently predicted the site to generate more than 16 megatonnes (mt) of export materials to global customers over the life of mine. With the project well underway and production expected to commence on schedule in 2026, subject to regulatory approvals, it will generate jobs for the local communities of far southwestern NSW, bringing growth and prosperity to the region.

We believe that our capability to supply final products to the market, by processing the Heavy Mineral Concentrate from the Copi Mine at our Mineral Separation Plant in Brisbane, Queensland, as a significant strategic advantage for our company.

"From this flagship project, the company will leverage the expertise and infrastructure built to further mining opportunities and as we grow

"WE PREFER TO WORK IN PARTNERSHIP WITH OUR SUPPLIERS AND CUSTOMERS TO PRODUCE MUTUALLY BENEFICIAL OUTCOMES, SO IF THEY ARE SUCCESSFUL, THEN WE ARE"

- JOHN COSTIGAN, CHIEF OPERATING OFFICER, RZ RESOURCES

our understanding of the battery minerals and rare earth minerals sector, RZ Resources will look for downstream opportunities in that space," Costigan elaborates.

### SOURCING A WINNING TEAM

At the centre of the company's people-first culture, RZ Resources maintains a deep commitment to zero harm and providing a safe environment for all employees, subcontractors, visitors, and members of the public.

"We believe our greatest strength

is our people and we know that with the right team, we will deliver one of the world's most significant critical mineral and rare earth resources projects in Australia," details Costigan.

"At RZ Resources, we are guided by openness, honesty and two-way communication, and strive to establish a workplace where our people are empowered to live our values every day," he continues.

There is a labour shortage in the market at present and due to the specialist nature of the industry, the greatest challenge facing the





AMC consultants were an integral part of our team during the development of the Copi DFS. Their expertise in mineral sands mining, combined with their commitment to working closely with our technical team, made a significant contribution to the success of the project. Their team was knowledgeable, experienced, and always willing to go above and beyond to ensure that our needs were met. We were particularly impressed with their ability to deliver concrete achievements with numbers attached, such as undertaking the mining component of the DFS, LG pit optimization, strategic mine plans, pit designs, coaching our junior mining engineers, and supporting budget costing for mining contractors. They also provided valuable advice on devising a mining strategy to optimize cashflow and improve NPV, as well as developing a tactical schedule approach to incorporate backfilling, reducing haulage, open areas, whilst maintaining pond length. AMC's work was of the highest quality, and we were impressed by their level of professionalism and attention to detail throughout the project. We highly recommend AMC consultants to any mining company looking for a knowledgeable and committed partner.



– John Costigan, Chief Operating Officer, RZ Resources



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





have been selected for their technical expertise, shared values and cultural alignment. We prefer to work in partnership with our suppliers and customers to produce mutually beneficial outcomes, so if they are successful, then we are,” Costigan lays out.

RZ Resources continues to see strong demand for the high-quality critical minerals and mineral sands to be produced at the Copi Mine. Because of this, its partners and suppliers are critical to the success of every intricate rung of the entire business, and the company takes great pride in the relationships that it has built and continues to build.

“As we pursue an offtake strategy, we expect critical minerals demand will translate into additional agreements,” he tells us.

### **AN AMBITIOUS AND RESPONSIBLE FUTURE**

Ambitious plans for the future of the company are already in motion, as RZ Resources has developed a growth strategy to deliver jobs and economic benefits to the local community, alongside significant value to its shareholders.

“As demand increases for our sustainable and high quality critical minerals, including rutile, zircon and rare earths, RZ Resources is well-positioned to play its part in the global economy and deliver critical

company lies in recruiting the right people with the correct skillset in a market that is perilously declining in the quantity of skilled labour.

As the company continues to grow, finding professionals is becoming even more of a key priority and the wish list includes mining professionals, technicians, operations and maintenance specialists, and earthworks professionals.

“We are building a team of industry experts, who have built mines before and have decades of experience

running significant operations of this scope and size. By embedding ESG outcomes into the company’s agenda we have provided a real sense of purpose for our team,” Costigan notes.

Another key relationship that must be nurtured and developed over time, integral to every business, is that of the various components which compile to form a successful supply chain.

“Key suppliers at present include our partnering consultants who





minerals and rare earths to customers worldwide from mid-2026,” Costigan acclaims.

From the outset, the RZ Resources team has built a long-term, responsible business, committed to sustainable mining practices and focused unwaveringly on delivering value to the local communities and to shareholders. An important part of maintaining this shared responsibility is ensuring the practices of First Nations peoples are respected during the construction and operation of new projects and that culturally significant sites are cared for jointly through the development of a Cultural Heritage Management Plan with Traditional Owners.

“We understand that our social licence to operate is a privilege that is earned from the community and have committed to undertaking ongoing consultations that will actively identify and mitigate any emerging issues during the project’s life. Additionally, the company is committed to providing communication openly,

“RZ RESOURCES IS WELL-POSITIONED TO PLAY ITS PART IN THE GLOBAL ECONOMY AND DELIVER CRITICAL MINERALS AND RARE EARTHS TO CUSTOMERS WORLDWIDE FROM MID-2026 ”

- JOHN COSTIGAN, CHIEF OPERATING OFFICER, RZ RESOURCES

honestly and in a timely manner with all stakeholders,” he adds.

A prime example of this responsible process is RZ Resources’ work on the previously mentioned Copi Project, including negotiations with Traditional Owners, the wider farming community and local towns such as Wentworth and Broken Hill.

Similarly, at RZ Resources, the entire company remains guided by openness, honesty and two-way communication, whilst striving to establish a workplace where its people are empowered to live a specific set of shared values every day.

“RZ Resources is an equal opportunity employer with a commitment

to diversity and inclusivity and we encourage professionals from all backgrounds to apply for jobs at the company. Our vision is to embed the principles of diversity, equity, and inclusiveness in our business from the start to help make us an employer of choice for our future workforce,” finishes Costigan proudly. 🌍



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