

Before the Proposed Te Tai o Poutini Plan Hearings Panel

In the Matter of

the Resource Management Act
1991 (**Act**)

And

In the Matter of

of a submission (S491) and further
submission on the Proposed Te Tai
o Poutini Plan by Bathurst
Resources Limited and BT Mining
Limited

Statement of Evidence of **Richard John Tacon** for Bathurst Resources Limited and BT Mining Limited Dated: 29 September 2023

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INTRODUCTION

Qualifications and Experience

1. My full name is Richard John Tacon.
2. I am the Chief Executive Officer and an executive director of Bathurst Resources Limited (**BRL**). I have held those roles since March and April 2015 respectively.
3. I am also a director of BT Mining Limited (**BT Mining**), an incorporated joint venture company with Talleys Energy Ltd and of which BRL is a 65% owner.
4. I sit on the board of the New Zealand Mines Rescue Trust, Straterra, and Minerals West Coast. I was formerly the Chair of the Coal Association of New Zealand, which was later amalgamated into Straterra.
5. I studied Mineral Technology at Otago University, before obtaining a coal mining certificate from TAFE (Technical and Further Education) NSW in 1984. I hold first, second and third class coal mining qualifications from NSW Coal Mining Qualifications Board. I hold First Class Coal Mine Managers and Senior Site Executive (Open Cut) Certificates of Competency in New Zealand. I have also completed the New Zealand Mine Incident Controller training.
6. I have been employed in the coal mining industry since 1979. My experience in the industry, prior to joining BRL, can be summarised as follows:
 - (a) In 1979 I accepted a role as trainee mineworker with New Zealand State Coal, in the Liverpool State mine located in Greymouth.
 - (b) In 1980, I moved to Australia to further my mining career. From October 1980 to April 1985, I worked as a mineworker and mine driver for BHP Collieries Pty Limited.
 - (c) I shifted to Powercoal Pty Limited in April 1985, working as a mine driver at the Myuna colliery.
 - (d) I shifted to management in April 1990, accepting a position as undermanager for the Charbon colliery, owned by Blue Circle Southern Cement.
 - (e) In January 1992, I moved back to Powercoal Pty Limited, to act as undermanager at the Angus Place Colliery, operating in the Lithgow seam. I remained at Powercoal for the next 20 years, through the acquisition of Powercoal by Centennial Coal in 2002 and subsequent rebranding. I held a

variety of roles, being promoted at regular intervals and eventually held the position of General Manager of the Newstan and Awaba mines.

- (f) I then became the General Manager of West Continuous Miner Operations for the Western region. In this role, I was responsible for overseeing 3 mega-tonnes of coal per annum from the Clarence, Charbon, Ivanhoe and Berrima collieries.
- (g) I shifted into the role of General Manager of Western Projects in February 2008, and was then promoted to the General Manager Western Operations position in February 2009. This role required the oversight of 6 operating mines, generating a total of 10 mega-tonnes per annum and with 900 employees.

SCOPE OF EVIDENCE

7. I provide evidence on behalf of BRL and BT Mining (together, **Bathurst**) on Bathurst's submission on the proposed Te Tai o Poutini Plan (**TTPP**).
8. The following evidence addresses Bathurst's submission, and further submission points that relate to the Strategic Direction and Introduction/Whole Plan provisions in the TTPP. The purpose of my evidence is to provide a broad overview of our operations on the West Coast. In order to assist the Hearings Panel to understand the critical role that mining plays on the West Coast, I would be happy to arrange for the Panel to undertake a site visit to the Stockton mine. It is only through visiting the mine that the scale and complexity of this operation can be properly understood.
9. My evidence covers the following matters:
 - (a) Bathurst and BT Mining;
 - (b) The Stockton mine;
 - (c) Crown Mineral Rights
 - (d) Economic benefits of Bathurst's operations on the West Coast;
 - (e) Social effects of mining on the West Coast;
 - (f) Environmental values;
 - (g) Proposed TTPP – key issues; and
 - (h) Conclusions.

BATHURST AND BT MINING

10. BRL is an ASX listed company, with the ticker ASX:BRL. Originally formed in Australia in 2007, it re-domiciled to New Zealand in March 2013. BRL started its New Zealand operations in 2011.

Export Focus

11. Early on in its existence, BRL's primary commercial strategy was to target high value export coal opportunities. As part of this strategy, it purchased two exploration permits and an application for a mining permit from L&M Coal Holdings Ltd in 2010 (by purchasing all the shares in the company that became Buller Coal Ltd). The objective was to develop a coking coal mining operation across the larger Buller coalfield, comprising the Denniston Plateau to the south and the Stockton Plateau to the north.
12. This project is called the "Buller Project". Mining at the Escarpment mine commenced in 2014. The Escarpment mine was placed into care and maintenance in early 2016 but will be brought back into operation in the future if favourable pricing conditions develop. The Stockton mine was also purchased by BRL in 2017 and forms part of the wider Buller Project. The Stockton mine remains in operation.
13. The Buller coalfield covers an area of about 200 km² extending from the Mokihunui River in the north to near the Buller River in the south. Reported coal resource estimates for this field total 175mt with coal reserves for Buller being 30mt.¹ Conversion of the resource into a reserve is dependent on markets, land access, costs of mining etc.
14. The key difference between the domestic mines and the export permits is the quality of coal they produce. Domestic mines such as Takitimu produce what is commonly called "thermal" coal. This can be used by industrial customers to produce energy (for example in dairy operations), or to produce heat (for example for steam-electric power generation). By contrast, the export permits primarily contain metallurgical or "coking" coal – a low-ash, bituminous coal, which is used in manufacturing steel and other iron products. It is a much higher quality coal and, because of its use, commands a much higher price.
15. There is no domestic market for coking coal in New Zealand, because we do not produce steel using blast furnace methods. Customers for this coking coal are primarily steel mills located in Asia, who also source coal from Australia, Columbia and other coal exporting countries.

¹ Alan Sherwood, *The Geology and Resources of New Zealand Coalfields Monograph 33* AUSIMM, 2019, page 143.

16. Over the past decade, BRL has acquired more of the permits across the Buller coalfield such that it now owns or has an interest in a continuous line of permits from Escarpment in the south to North Buller in the north as set out below in Figure 1. The blue shaded areas are the permits held by BRL (and subsidiaries). The yellow shaded areas are permits held by BT Mining, which I will discuss in more detail below. These permits are set out in **Appendix B** of my evidence.



Figure 1

17. What this means is that, instead of a series of artificially defined permit areas, Bathurst can now look at the development of the entire Denniston Plateau (which covers the southern permits in Figure 1) as one area. In addition Bathurst's interest in BT Mining has also greatly improved the commercial potential of the entire Buller coalfield.

Domestic market

18. BRL's domestic coal business has been built on acquiring existing operating coalmines. These are:
- (a) **Cascade:** BRL purchased the Cascade mine in March 2011. Located on the Denniston Plateau, it is part of the Buller Project, but its point of difference was that it was already an established open cast coal mine at the time of purchase. The primary customer of coal from the mine (including at the time it was purchased) was Holcim (New Zealand) Limited. Once Holcim closed there was no other domestic demand on the West Coast and the Cascade mine was placed on care and maintenance in late 2015. The mine is now being rehabilitated for final closure but remains live in our planning both in terms of its granite resource and for potential wider Plateau infrastructure.

- (b) **Takitimu:** Acquired with Cascade in March 2011, the Takitimu mine is an open cast mine located in Southland. It is a well-established mine near the historic mining settlement of Nightcaps. It produces thermal coal for domestic sales. Its main customers are Fonterra and other large industrial users in Southland. It currently produces approximately 225,000 tpa of coal.
- (c) **Canterbury:** Located at Coalgate, 70 kilometres west of Christchurch, BRL acquired the Canterbury mine in late 2013. This mine is now in the process of rehabilitation and closure while operating to service the local dairy processing industry.

BT Mining Limited

- 19. In 2017, BRL expanded by forming a joint venture with Talley's Energy (BT Mining Limited) and acquired three mines from the former state owned coal company, Solid Energy:
 - (a) **Stockton (West Coast):** An open cast coal mine located on the Stockton Plateau, producing coking/metallurgical coal for the export market. The mine produces 1,000,000 tpa of coal under current market conditions but can produce up to 1,800,000 tpa. It had an established customer base.
 - (b) **Rotowaro (Waikato):** An open cast coal mine producing thermal coal for the domestic market. It is located 9 kilometres west of Huntly, Waikato and produces approximately 700,000 tpa of coal.
 - (c) **Maramarua (Waikato):** An open cast coal mine producing thermal coal for the domestic market. It is located 45 kilometres north of Huntly, Waikato and produces approximately 150,000 tpa of coal.

End use of the coal

- 20. **Appendix A** shows how Bathurst coal is used (including coal mined from the Waikato and Southland). All Stockton coal goes into the export market for use in steelmaking process or for the production of other carbon fibre products.

STOCKTON (INCLUDING CYPRESS) MINE

- 21. The Stockton mine has been the major coking coal producer in the Buller field. Originally starting as an underground mine at Millerton (now part of the Stockton mine) operated by the Westport Coal Company Ltd, it was acquired by State Coal Mines in 1944. Large scale open cast mining commenced in 1944 and was taken over by Solid Energy New Zealand Ltd as a state-owned enterprise in 1987. Solid Energy continued to develop the mine reaching a peak production of around 2m

tonnes in 2008. However, market conditions changed and all the assets of Solid Energy were put up for sale after its entry into Deed of Company Arrangement in 2015. As outlined above, BT Mining purchased the Stockton mine in 2017

22. The Stockton mine (which includes the adjacent Upper Waimangaroa mining permit area and the active Cypress mine) sold around 1.023mt of coal for the FY 2022 generating around \$128m of revenue.
23. Currently the Stockton Mine has some 10 years of reserve ahead of it.
24. The mine comprises a number of discrete pits along with the major infrastructure associated with a large scale open cast mining operation. These include extensive haul roads around the mine site, workshops, storage bays, explosive stores, hazardous material stores, offices, coal handling and washing facility; coal stockpiles, aerial ropeway from the Plateau to the Ngakawau rail load out (and all associated infrastructure at Ngakawau) together with a complex array of water management infrastructure including large scale sumps such as the Mangatini sump, coal fines storage and a considerable network of pumps and pipelines. There is over 5ha of buildings within the mine site. Rehabilitation of the worked out areas is progressive and is occurring in parallel to the extractive activities.

CO₂ emissions and Stockton's coking coal

25. The high vitrinite and low ash properties in our Stockton coal offer fuel savings to our customers when compared with other seaborne coking coals. This coal also produces lower carbon dioxide emissions per unit of steel than other coking coal produced overseas. Over the last year we have been able to quantify the emission savings by using one of our iron and steel manufacturing customers in India as a case study.
26. Our Indian customer opts to blend our coal with Australian and Indian coals, precisely because our low ash and high vitrinite content reduces their fuel use, the rate of slag formation in the furnace, and it also improves the coke strength in the furnace. In reducing fuel use, they also save on costs. Our analysis confirmed that at this single plant alone, the benefits of using our coal amounts to an annual reduction in CO₂ emissions of 145,000 tonnes (**tCO₂**). This reflects a reduction in the blast furnace fuel rate of 14.24 kilograms of coal per tonne of hot metal produced, at an annual plant production of 3.6 million tonnes (**Mt**) of hot metal.
27. We then extrapolated this result to our total export coal business of around 1.1Mt per year, which equates to an average 315,000 tCO₂ emissions avoided each year. Importantly, we obtained independent verification of these results from SGS

Laboratories Limited. The report states “the derived emissions reductions are fairly calculated for the Alpine blend”, which refers to our export coal specification.

28. The global steel industry contributes an estimated 7 to 11 percent of world greenhouse gas emissions. Several alternative, lower-emissions technologies are being investigated, including replacing coal with hydrogen to reduce iron ore. While the early signs show some promise, the technology is many years away from being able to be used commercially and at scale. This also reflects that even when the alternatives become readily available, it will take decades to convert the world’s existing iron and steel plants to the new technologies.
29. So for now, coal remains an essential input into the steel industry. The International Energy Agency projects demand for steel to continue increasing. And we play our part in supplying coal that is suitable for this purpose in New Zealand, and to our overseas customers, who can now quantify their emissions reductions from using our coal.
30. Steel is also a major requirement in providing alternative technology solutions to reduce CO₂ emissions. For example, a five-megawatt wind turbine requires on average 900 tonnes of steel, and the average electric vehicle contains 0.9 tonnes of steel. Further, finished steel is infinitely recyclable via the Electric Arc Furnace with few extra emissions, meaning it is a green product over its lifetime.

CROWN MINERALS RIGHTS

31. Coal in New Zealand is either owned by the Crown or owned by private individuals. All of the coal over which Bathurst holds permits on the West Coast is owned by the Crown.
32. Bathurst holds coal mining licences and ancillary coal mining licences issued originally under the Coal Mines Act 1979 and exploration and mining permits issued under the Crown Minerals Act 1991. The coal mining licences (and ancillary coal mining licences) were acquired from Solid Energy as part of the purchase of the Stockton Mine and the Sullivan CML. The exploration and mining permits have been acquired either again as part of the purchase of the Solid Energy assets, the purchase of Buller Coal Ltd from L&M Coal Holdings Ltd, or directly by application for the permits to the Crown.
33. Coal mining licences and ancillary coal mining licences gave the right to the holder to enter onto the land covered by the relevant licence and to conduct mining and mining operations on that land. Any coal won became the property of the licence holder. Each of these licences have conditions governing how the authorised activities can be carried out and requirements for rehabilitation of the land.

34. The ability to apply for new coal mining licences ended with the repeal of the Coal Mines Act 1979 (being replaced by the Crown Minerals Act) in 1991. Further the right to extend the term of existing licences was taken away by the amendments to the Crown Minerals Act 1991 in 2002.
35. Since the passing of the Resource Management Act in 1991 licence holders have also been required to hold any relevant regional council consents in respect of activities undertaken pursuant to the licence. (Thus mining at Stockton, for example, is authorised by the licence and all the associated regional consents held). Also if a wildlife permit is required under the Wildlife Act 1953 that must also be obtained.
36. Responsibilities for the enforcement of the licence conditions is split between district and regional councils and WorkSafe depending on the functions of each of these entities.
37. The licences continue in force by virtue of the transitional provisions of the Crown Minerals Act 1991 (see Schedule 1, subpart 2). Caselaw has established that buildings constructed on licence areas do not require building consents but must be constructed in accordance with the Building Code.²
38. In the case of the licences held by Bathurst they all expire 31 March 2027 and new permits will be required to obtain continued access to the minerals.
39. In respect of the exploration permits and mining permits held by Bathurst these are issued under the Crown Minerals Act 1991 and give access to the mineral only. In addition, it is necessary for Bathurst to enter into access arrangements with landowners to access the coal and to hold district and regional resource consents (as required). Often wildlife permits are required as well. The term of permits granted under the Crown Minerals Act 1991 can be extended on application.
40. A list of the permits and licences held by Bathurst is set out in **Annexure B** of my evidence.

ECONOMIC BENEFITS OF MINING ON THE WEST COAST

41. Coal mining on the West Coast has a long and proud history starting in the 1860s and which is linked to a rich social past and some spectacular engineering innovations (such as the Denniston incline). More coal has been produced from the West Coast than any other region in New Zealand.³ Initially coal was produced for shipping and the railways with production of 50,000 tonnes per annum in 1880 rising

² *Stewart v Grey County Council* [1978] 2 NZLR 577.

³ Alan Sherwood, *The Geology and Resources of New Zealand Coalfields Monograph* 33 AUSIMM, 2019.

to 1.34mt by 1914. Given this output by private companies the government created the State Coal Mines in 1901 to challenge their monopoly. From the 1970s exports of coking coal began reaching a peak of 2.6mt in 2008 (of which approximately 2mt was from the Stockton mine) and this is now the main type of coal mined and exported from the Coast.

42. The social and economic influence of over 150 years of coal mining on the Coast cannot be overstated – “without coal mining it is likely that there would have been little development of the region”.⁴
43. The Bathurst group employs around 620 people directly and makes a significant contribution to the economic wellbeing of the regions of the West Coast, Canterbury, Southland and the Waikato through this direct employment (\$78m pa) as well as taxes, coal royalties, energy resources levy (around \$67m pa) and equipment and supply purchases (\$216mpa).⁵ It is generally accepted that the flow-on economic effect in a community is 3.2 jobs for each mine job.
44. While there have been studies of the socio-economic impacts of coal mining on the West Coast and the Buller region over the years, Bathurst has decided to take the lead on commissioning a new study building on past work and to bring the conclusions up to date. We have engaged Dr Mark Sargent of Aigis Group (Newcastle Australia) to review existing studies and to update and add to these as necessary. Essentially the outcome of the proposed work will be to describe the social and economic impacts of mining to the districts and region of the West Coast which will allow decision makers to understand the counterfactual of the socio-economic impacts on the West Coast if there were no coal or other mining. We will be presenting that work as part of the evidence for the Minerals Extraction topic later in this hearing process.
45. Dr Sargent has committed to providing his report by the end of March 2024 in time for the Minerals Extraction hearing. The timing of this is linked to the need to approach and obtain information from the widest range of sources possible including: central government, local government, mining industry; local businesses, local community groups, schools, iwi, employees etc.

SOCIAL IMPACTS OF MINING ON THE WEST COAST

46. As set out above, Bathurst is a key employer on the West Coast. Bathurst places considerable importance on becoming part of, and contributing to, the communities in which it operates.

⁴ Alan Sherwood, *The Geology and Resources of New Zealand Coalfields Monograph 33* AUSIMM, 2019, page 139.

⁵ September 2022 Quarterly Report.

47. Our operations on the West Coast provide benefits across every level of the community – via our employees, suppliers and contractors. We proudly support a policy of hiring local workers rather than hiring from outside a region. And we maintain collaborative relationships with the wider community.
48. Our community sponsorships and donations in FY22 included the following:
 - (a) West Coast Search & Rescue;
 - (b) Life Education Trust West Coast;
 - (c) Buller Community Trust Fund;
 - (d) Te Hā o Kawatiri; and
 - (e) West Coast ROA Mining Rescue Helicopter Service.
49. This year our sponsorship programme across Bathurst and our joint venture BT Mining included total sponsorship incurred and committed to of \$415,000.
50. We are also delighted to have completed our eleventh year of supporting the Bathurst Buller High School Scholarship programme. The scholarship supports a student to attend university by providing \$3000 per year (for up to four years) towards their study.

OUR ENVIRONMENTAL VALUES

51. Respect for the environment is a core value for us. Land clearing is a necessary part of our development and operational activities. We firmly focus on minimising our impacts on the landscape, ecosystems and heritage values.
52. Where impacts on natural values cannot be avoided or mitigated, we take other steps to ensure beneficial environmental outcomes, such as relocating species and/or implementing biodiversity offset projects.
53. In accordance with the conditions of our resource consent and access arrangements for the Escarpment Mine, we fund environmental compensation programmes calculated to be valued in excess of \$26.4 million on the Denniston Plateau and the Heaphy catchment area to manage biodiversity values and threats.
54. Our Denniston programme primarily focuses on biodiversity threat management. This includes pest plant management, weed control, pest control and the monitoring of native animals, birds and plant species. We also fund heritage focused programmes valued at \$589,000 (in 2013 value terms).

55. Our Heaphy programme covers a wide range of biodiversity management, including:
- (a) biodiversity outcome monitoring;
 - (b) inventory and survey of pest species; and
 - (c) pest management and result monitoring.
56. In addition, we also carry out environmental compensation associated with the Cypress Mine resource consents. This includes carrying out pest and predator control over 1000 hectares in the Ōpārara catchment at a value of approximately \$200,000 per annum. We have committed to this for 20 years beyond the life of the Cypress Mine. We also contribute to the Department of Conservation's aerial 1080 operation every three years at a value of approximately \$200,000 to ensure pest control occurs over the Buller Plateau.
57. We are also conscious of the increasing concerns of our local stakeholders and other local water users regarding ongoing availability of water, security of access and the potential for impacts on water supply. Nationally mining is a small water user but at a catchment scale, can be one of the largest.
58. We are continuously improving our management of water to achieve positive environmental and social outcomes.
59. We are steadily increasing monitoring of water use across our operations, bringing a renewed focus and proactive management of water systems and activities. This is being actioned by updating site water management plans, water balance models and setting accountabilities for measuring the effectiveness of our water management controls.

PROPOSED TTPP – KEY ISSUES

60. Bathurst is very supportive of a Plan that properly recognises the very significant role that mining plays on the West Coast and in particular to the Buller district.
61. As we indicated in our submissions on the Plan we strongly support the introduction of the Mineral Extraction and Buller Coalfield Zones and wish to ensure that the rest of the Plan is not only consistent with the intended objectives and provisions of those zones but also does not unexpectedly restrict the anticipated activities from occurring in those zones.
62. Our submissions addressed those other parts of the Plan that we think might do this and the details will be, I understand, presented by our counsel and others through the course of these hearings.

63. It is of prime importance for Bathurst that it is able to continue to mine coal responsibly and to play our part in providing for a prosperous district and regional economy.
64. Accordingly, we support Mineral Extraction Strategic Objectives as appropriate for the districts and for the communities of the districts. The West Coast and in particular the Grey and Buller Districts are the location of some of the most significant coal deposits in New Zealand as the long history of coal mining on the West Coast shows.

CONCLUSION

65. Our key concern is that the underpinning framework of the Plan allows and provides for the continuation of coal mining on the West Coast and recognises the contribution that the mineral sector makes to the West Coast.

Richard John Tacon

29 September 2023

Appendix A

Product Use

How is our product used?

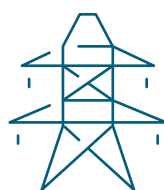
Construction

in which most buildings or structures are made from steel.



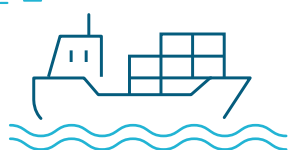
Electricity generation

when there isn't enough green energy supply to meet demand.



Semi-conductors

are an essential component in many electronic devices such as solar panels and smartphones.

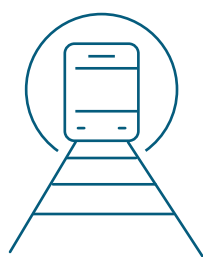


Transport

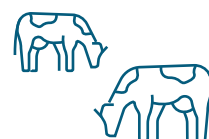


Carbon fibre

which has many uses including sporting equipment.



Infrastructure



Fuelling of local industries

that make essential everyday consumables.



Appendix B
Permits held on the West Coast

Held by	Ref
BT Mining Ltd	
<i>Stockton</i>	CML 37 150
	ACML 37 150/02 – aerial ropeway
	ACML 37 150/03 – Ngakawau loadout
	MP 41 810
	MP 52 937
<i>Upper Waimangaroa/Cypress</i>	MP 41 515
Bathurst Coal Ltd	
<i>Sullivan</i>	CML 37 161
	ACML 37 161/01
	ACML 37 161/02
	ACML 37 161/03
	ACML 37 161/04
<i>Cascade Creek</i>	MP 41 455
<i>Whareatea West</i>	MPA 60 138
<i>Denniston Gold</i>	MEP 60 321
Buller Coal Ltd	
<i>Escarpment</i>	MP 51 279
<i>Cascade Creek</i>	MP 41 332
	MP 41 274
	MP 41 456
<i>West Coast</i>	EP 40 628
<i>Denniston</i>	EP 60 520
<i>Millerton-Fly Creek</i>	EP 60 521
<i>Blackburn</i>	EP 60 522
<i>Coal Creek</i>	MP 56 233

Appendix C

Life Cycle of a Mine

1. Coal, like any other mineral, can only be extracted from where the mineral is located. On the West Coast the coal resources are inevitably located in the rural areas.
2. Typically a mine would start with prospecting (generally involving non-invasive activities) to identify a resource that warrants further consideration. In the case of coal given the extensive work previously done by the government there is a high level of knowledge of where the significant coal deposits in New Zealand are. I should note that in the mining industry the words “resource” and “reserve” have particular and specific meanings.
3. A resource is a report of the estimated tonnage of minerals of the type being targeted in a defined area; whereas a reserve is a report of the estimated tonnage of economically mineable minerals in a defined area based on location, quantity, grade, geological characteristics, legal access and a viable market (among other factors).
4. Once a potential resource is identified a company may move to the exploration phase. This may involve drilling core samples, digging trenches or similar activities to delineate the boundaries of the resource and establish whether it is worth moving to the next stage of converting the resource into a reserve.
5. Bathurst conducts exploration within its existing coal mining licence areas and mining permits to allow future reserves to be identified and for there to be a logical progression for its mines.
6. As Stockton mine illustrates coal mining, as with other mining, progresses across the landscape as one pit is worked out and another pit is opened. As part of all consents granted for exploration and mining there is the requirement to rehabilitate the sites affected to a very high standard.