

A Reinterpretation of the History of the Acquisition of the Blackwater Gold Mine

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A not uncommon theme in mining history which always evokes sympathy is the story of prospectors receiving next to nothing for the sale of a mine which they have found, and that mine going on to produce great wealth.¹ The historiography of the acquisition of the Blackwater gold mine in the Reefton goldfield of the South Island of New Zealand follows a similar *leitmotiv*: the extensive literature concerning the history of this mine, which until recently was the second biggest gold producer in New Zealand,² is in agreement that the discoverers sold the mine for a pittance to a speculator because they had no choice; the speculator then made a huge, unjustified profit in selling it on to the biggest mining company on that gold field; and the vendor profit that this company made in floating a new company to operate the mine is considered so unremarkable that it is not even commented upon.³ However, a more rigorous analysis of this series of transactions involving the calculation of a present value of the mine at each transaction, and the comparison of these values with the considerations paid, results in the drawing of the opposite conclusions to this legend and leads to a reinterpretation of the history of the acquisition of the Blackwater gold mine.

The richest quartz reef on the Reefton Gold Field was the last to be discovered. Although the first quartz reefs had been located in 1872,⁴ the reef on which the Blackwater mine was developed was not found until 1905. For some years, specimens of quartz containing gold had been turned up in the alluvials in the Blackwater district, which is only a few kilometers from Reefton. Known as float, these loose specimens indicated the presence of undiscovered auriferous quartz reefs somewhere in the vicinity.⁵ However, finding any such reefs was difficult because of the extensive mantle of glacial debris and alluvium covering much of the country which obscured the underlying rocks that would contain the conjectured gold reefs. The only places where prospecting could be effective were areas where streams had cut through the alluvium, washing it away to expose the underlying bedrock. It was in such a locality that a party of four Blackwater prospectors discovered, almost by chance, what turned out to be the

richest reef in the Reefton gold field.⁶ Whether they had selected this area to prospect, or whether they had merely casually stopped in that area to eat lunch while returning from prospecting elsewhere is unclear.

The successful prospectors had been grubstaked by the Upper Blackwater Miners' Association, which was the usual district prospecting venture in New Zealand subsidised by the government. The Mines Department provided a £1 for £1 subsidy of £200 to this locally sponsored association to enable it to put eight prospectors on the field. The prospectors were provided with a grubstake of £1 a week each, which covered their food and expenses, and they were entitled to own and sell any discoveries they might make.

One party of four, William Meates, Ernest Bannan, David Ross and James Martin, had been scouring the creeks in the bush without any luck for four weeks, when on the last day before their return to Blackwater, they made their discovery only a few kilometers from Blackwater. The find was made quite casually, as these things sometime are: they were having lunch besides Greek creek when Martin found some gold-bearing quartz while rubbing his heel in the gravel in the creek.⁷ Stripping away some of the gravel disclosed an auriferous reef. The strike was made on 9 November, 1905, and because this was the birthday of King Edward VII, the prospectors named their find the Birthday Reef.⁸

The literature agrees that Reefton sharebroker and mining investor Percy Kingswell was having a drink in Dawsons' Hotel in Reefton when he heard of the discovery of 'something good' in the upper Blackwater.⁹ Next day he rode out to inspect the find and met three of the prospectors in Blackwater where he negotiated a three months' option to buy their find for £2,000.¹⁰

The decision of the prospectors to sell out for this figure is difficult to comprehend. They had carried out some desultory work to gauge the extent of their discovery, which Galvin says had indicated that the reef was three to five feet wide, and they had 'cut the reef at various points for a distance of 12 chains'. Quartz from the reef crushed in a pestle and mortar showed 'payable prospects', and samples taken by a Mines Department official over widths of three to four feet had assayed up to three ounces of gold to the ton, with no assay below one ounce.¹¹

Taking an average width of four feet of reef over a length of 720 feet, with 12 cubic feet of quartz weighing a ton, and each ton of quartz containing an ounce of gold worth £4, it can be calculated that such a reef could be expected to contain nearly

£1,000 of gold for every foot of depth the reef lived down. Assuming a reasonable sale price to be 10 per cent of the indicated gold resource, the reef would have to live down only 20 feet to justify a price of £2,000. Many rich reef discoveries turn out to be only surface expressions with no depth, so perhaps the prospectors were fearful concerning the likelihood of the reef living at depth, although they must have had some idea of the depth persistence of the reef, because according to Galvin, the Mines Department sample which assayed three ounces to the ton had been taken from the bottom of a shaft which they had sunk eight feet deep.

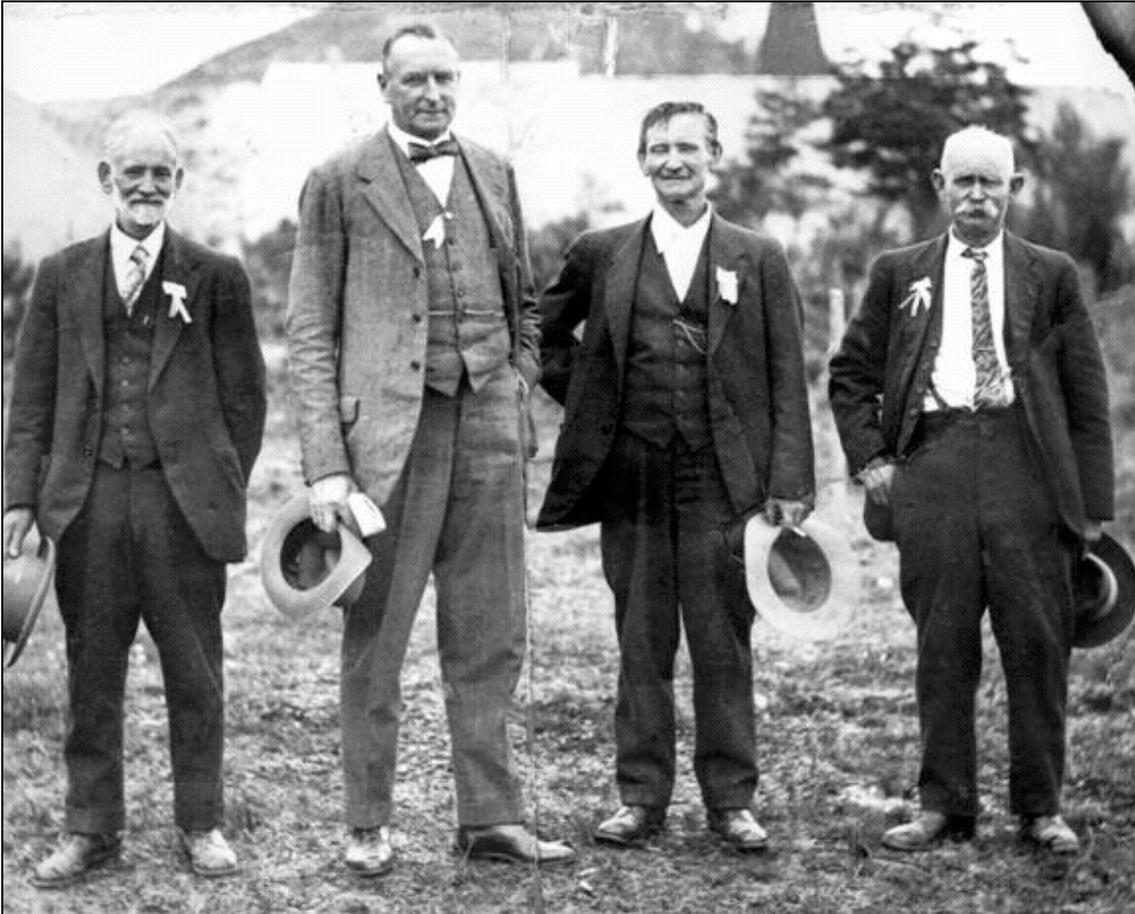
Despite the promising prospectivity of their claim, the discoverers willingly optioned it for three months at an exercise price of only £2,000. Irrespective of the indicated potential, the probability of receiving £500 each in three months' time seems to have been regarded by them as a considerable windfall at that time. Only Meares benefited much, albeit in a very modest way: he set up a store in Blackwater and later operated one in Waiuta. Bannan later ran a small passenger and parcel service from Waiuta to Ikamatua on the main road from Reefton to Greymouth, and Martin ended up as gardener at the Waiuta hospital. Later, when the mine opened up so well, sympathy for their poverty, compared with the wealth that the mine produced, fed the legend that the prospectors had not had a fair deal, and that this was because they had no alternative at the time they sold out, and had to accept the price offered. This is the opinion of the chroniclers of Waiuta:

Public recognition as the discoverer of the reef was virtually all that Martin received. It was not he and his fellow prospectors who were ultimately to profit from the enormous wealth they had uncovered. There never was really any question of any, or all the prospectors being able to raise the capital needed to exploit the reef. They were simple labourers without financial backing. They had little option but to sell their discovery to the highest bidder.¹²

In overlooking several points, this assertion distorts the facts. The discoverers did not sell to the highest bidder: they did not even call bids: in fact rather than the highest bid, they accepted the very first offer. It is also not correct that they had no other option: other 'simple labourers' in the Reefton gold field before them had gone on to further develop their prospects.¹³ Despite their claim's favourable prospects they chose to sell out early, rather than persist with efforts to confirm its promise in order to obtain a higher value. Although they had no financial backing, they made no effort to procure

any.¹⁴ It seems that their effort in tracing the reef a few hundred feet and scratching a shaft eight-feet deep had exhausted their initiative.

Figure 1: *Some Blackwater prospectors pictured at a Waiuta reunion 1930 with Ernest W. Spencer, general manager (1898-1910 & 1920-1936) of Consolidated Gold Fields of New Zealand Ltd group of companies, including Blackwater Mines Ltd. The occasion was to mark the 25th anniversary of the discovery of the Birthday reef in November 1905. Spencer (second from the left) is flanked by George and Thomas Bannan, whose brother Ernest was one of the discoverers, as was James Martin, at right.*



Source: Courtesy. Darrell Latham Reefton collection

The question none of the authors concerned with the history of the Blackwater mine has posed is why did the prospectors fail to approach the logical eventual buyer, the only major company then operating on the Reefton field, Consolidated Gold Fields of New Zealand Ltd (hereinafter referred as CGFNZ). This major London-based company, and an associate group company, Progress Mines of New Zealand Ltd, the formation of which had been sponsored by Rothschilds' Exploration Company, operated at this time, all the major mines on the Reefton field. It is also well known that because the mines they operate are wasting assets, major companies are always on the

lookout for additional mineral resources in their region to enable them to extend the life of their operations, or for growth.

When he wished to sell, Kingswell was in no doubt who the logical buyer was. As soon as he had exercised his option with the prospectors, Kingswell offered a six-months' option to CGFNZ to buy the claim for £30,000. CGFNZ accepted the offer with alacrity.¹⁵ The literature is agreed that with this financial consideration Kingswell got the best of a series of deals involving the Blackwater mine. Professor Salmon's version implies that Kingswell fleeced CGFNZ:

Sometimes local speculators and middle men would acquire newly discovered claims cheaply and sell them at a high price to a large English concern. Thus P.N. Kingswell purchased the Blackwater Mine from its four discoverers for £2,000 and resold it to Consolidated Gold Fields for £30,000. The English companies suffered from these excesses.¹⁶

Not all the £30,000 was profit, of course. In addition to paying his £2,000 acquisition cost, Kingswell must have incurred not-inconsiderable expenditure carrying out work to confirm the potential of the orebody. Immediately on obtaining his option from the prospectors he had set to work ten miners to test the potential of the reef - with spectacular results. By the time he exercised his three months' option, he had confirmed that the reef had a length of at least 800 feet, with the full extent still unknown because its lateral extensions were obscured by overlying glacial tillite. Several shafts were sunk, with one down 35 feet demonstrating the likelihood of the reef persisting at depth.¹⁷ Rather than diminish in depth, the reef seemed to be widening.¹⁸

Using the same parameters as above, the work undertaken by Kingswell can be calculated to have indicated 300 tons of ore to the vertical foot in the reef exposed. If the ore averaged an ounce of gold to the ton, this gives a resource value of £1,200 a vertical foot. Reefs on the Reefton field were fissure infill vein reefs and as such they usually had a greater vertical than lateral extent.¹⁹ If the reef persisted to only 800 feet depth, the same as its length, at a grade of one ounce to the ton it would contain no less than 240,000 ounces of gold worth £960,000. Some orebodies can be lenticular in shape, and even if it was so-shaped and lived to only an average depth of half the lateral extent exposed, it would still have been expected to contain 120,000 ounces worth nearly half-a-million pounds. Even with this alternative less optimistic view, an arbitrary valuation of 10 per cent of the inferred contained gold would indicate a value of some £50,000. The full length of the reef, and its depth, had not yet been exposed, so

Kingswell in selling such a promising potential for only £30,000 seems to have been selling at a discount to the value that had been inferred, rather than making an unjustified killing as the literature supposes.

Figure 2: *The Snowy River mill at the Blackwater mine. This water-powered mill was completed in 1908. In 1936 it was replaced by the Prohibition mill.*



Source: Courtesy. Darrell Latham Reefton collection

Immediately it obtained its option, CGFNZ swung into action, dispatching a team of a dozen picked miners under the group's mining superintendent to sink a series of shafts about 100 feet apart along the reef to prove its dimensions. One shaft was sunk to a depth of 230 feet in three months. All this work provided further confirmation of the impressive potential of the reef. With the excellent results obtained, the company decided to exercise its option with Kingswell when it was still only half way to the six months' expiry date they had agreed upon.

The company brought its associated group company in Reefton, Progress Mines of New Zealand Ltd, into the venture. A new group company, Blackwater Mines Ltd,

was formed in December 1906, to operate the mine.²⁰ CGFNZ and Progress Mines, which had expended less than £50,000 between them, including the £30,000 acquisition from Kingswell, vended the project to Blackwater Mines Ltd for £200,000 paid in 200,000 vendor shares of £1 each,²¹ achieving a profit of more than £150,000 between them. This consideration dwarfed all the other transactions dealing with this mine, yet it is ignored in the literature of the mine.

Blackwater Mines Ltd raised £50,000 working capital to equip and operate the mine by issuing 25,000 shares of £1 each at par for cash to each of CFGFNZ and Progress Mines. These two companies then offered these 50,000 shares to their shareholders at cost on a one-for-ten entitlement basis,²² retaining the £200,000 worth of vendor shares that had cost less than £50,000.

Discounting back the eventual net cash flow of the Blackwater mine over its life at an arbitrarily selected 10 per cent *p.a.* to allow for mining risk results in the calculation of a net present value for the mine at this stage of £115,000 (after deducting the £50,000 working capital introduced) indicates that the vendor consideration of £200,000 realised by the CGFNZ group companies was 174 per cent of this valuation. This mark up is in contrast to Kingswell's transaction: he had sold his claim to CGFNZ for less than it was then worth.

The £200,000 vendor consideration resulted in Blackwater Mines Ltd having an issued capital of £250,000, and as a consequence the company was so overcapitalised that it struggled in some years to achieve sufficient profit to service this bloated capital with dividends.²³ Although it operated what at the time was the second biggest gold producing mine in New Zealand,²⁴ Blackwater Mines Ltd's dividend record was disappointing despite the amount of gold produced and profits achieved. Dividends were paid in only 24 years of the company's 44 year life, and averaged only 7.5 per cent in each year they were paid, and of course less than this each year over the life of the mine.²⁵ The discounted rate of return of the dividend stream was in fact only 2.91 per cent *p.a.*, so if allowance is made for the opportunity cost of the money they had invested, Blackwater Mines Ltd was not a lucrative investment for the shareholders who had subscribed the cash.

To recap, the Blackwater mine legend has been that the prospectors had to sell their great discovery which went on to be a highly successful mine paying huge dividends for a pittance because they had no alternative; and that Kingswell who bought it from them sold out quickly for a spectacular, unjustified profit; while CGFNZ and

Progress Mines in selling it entered into an unremarkable commercial transaction that is not even commented upon.

This theme is *de rigueur* in the literature of the history of the mine. However it is sentimental and facile, and does not stand up to rigorous analysis. Although the prospectors sold their find for a fraction of its value then, they were not forced to, and their quick acceptance of the very first offer at a low price was a blunder of their own making, possibly resulting from their lack of enterprise: Kingswell sold out rather cheaply, at a discount to the enhanced value his work had established for the property; and CGFNZ and Progress Mines, who made a quick profit of more than £150,000, enjoyed the most remarkable vendor mark-up in this series of transactions, which was so egregious that it constrained Blackwater Mines Ltd's ability to service its capital with an adequate rate of dividends despite operating one of the biggest gold producing mines in New Zealand.

Endnotes:

¹ Mining history is replete with examples, one of the most egregious of which is the case of the shepherd Thomas Pickett who received £10 in 1845 for the discovery of the fabulously profitable Burra Burra copper mine. Pickett was working as a wood-cutter for the Patent Copper Company's smelter in Burra when he died in poverty in 1851. See, Ian Auhl, *The Story of the 'Monster Mine': The Burra Burra Mines and its Townships 1845–1877*, District Council of Burra Burra, 1986, pp. 59-61.

² For years the Blackwater mine was the second biggest gold producer in New Zealand, but during the 1990s its production of 733,000 ounces was exceeded by the MacRae's mine in Otago. Biggest producer in New Zealand was the Martha mine at Waihi in the North Island which produced 30 million ounces of electrum containing 7 million ounces of gold up to 1951. The balance of the bullion was silver. The Martha mine reopened in the 1980s and is still in production.

³ Gerard Morris (ed.), *Waiuta. The Gold Mine. The Town. The People*, Reefton, 1986, p. 5; and the academic thesis on which this book is based, A.G. Nightingale, 'Waiuta: A History of a Quartz Goldmining Community on the West Coast,' MA thesis, University of Canterbury, Christchurch, 198, p. 5; J.H.M. Salmon, *A History of Goldmining in New Zealand*, Wellington, 1963, pp. 221. Darrell Latham, *The Golden Reefs. An account of the Great days of Quartz-Mining at Reefton, Waiuta and the Lyell*, Nelson, 1984, pp. 312-314, offers a factual account.

⁴ Brian R. Hill, '“The Little Man” David Ziman, mining giant: the biography of an entrepreneur,' PhD thesis, Flinders University, Adelaide 2000, p 2.

⁵ P. Galvin, *New Zealand Mining Handbook*, Wellington, 1906, p. 91.

⁶ The mine developed on the site of the discovery, the Blackwater mine, went on to produce 733,000 ounces of gold, more than a third of all the gold produced in the Reefton gold field. See, J.M. Barry, *The History and Mineral Resources of the Reefton Goldfield, Resource Information Report 15*, Wellington, 1993, p. 47.

⁷ According to an account by the daughter of William Meates, 'Ghost of a gold town,' Radio New Zealand tape, Sound Archives, Timaru, 1968.

⁸ The Blackwater mine continued to have associations with royal sentiments: it closed (with the other Reefton mines) for a day's mourning when King Edward died in May, 1910, see letter from CGFNZ general Manager E.W. Spencer, to CGFNZ head office in London, 17 May, 1910, in CGFNZ collection in the Alexander Turnbull Library, Wellington. Several decades later the royal enthusiasm must have waned somewhat because when King George V died in 1936, the mine observed only two minutes' silence as a mark of respect, see Ann Hutchinson, '31/1/36,' *Our Own Correspondent*, Hokitika 1986, p 150. The coronation of King George VI in 1937 was attended by the wife of a former Blackwater mine

manager, R.A. Stewart. (She was on her way to join her husband in Abosso in West Africa where he had been appointed manager of Ashanti Mines). The union at the Blackwater mine complained that no Coronation Day holiday was granted to the miners: 'While the Union Jack fluttered on the breeze from the mine poppethead, His Majesty's loyal subjects toiled and sweated in the bowels of the earth'. See Ann Hutchison, '13/5/37,' *idem.*, p. 160.

⁹ The subsequent authors concerned with the Blackwater mine all seem to have followed the version provided by Kingswell's friend Harman Reeves, a Dunedin sharebroker with whom he had some other mining ventures See his biography, Harman Reeves, *The Years That Are Gone*, Dunedin, 1947.

¹⁰ Latham, *The Golden Reefs*, p 313, and Galvin, *New Zealand Mining Handbook*, 1906, p. 92, are correct that the option was for three months, but Morris, *Waiuta. The Gold Mine*, p. 5, and Nightingale, 'Waiuta: A History of a Quartz Goldmining Community', p. 5, say it was for six months.

¹¹ Galvin, *New Zealand Mining Handbook*, 1906, p. 91.

¹² Morris, *Waiuta. The Gold Mine*, p. 5.

¹³ Among them, Adam Smith who discovered the Wealth of Nations mine, Antonio Zala who found the Alpine United at Lyell, and William Kirwan with his Kirwan's Reward mine.

¹⁴ They had the backing of the little local prospecting association which had put them in the field, and once they had consumed all the association's meager funds an approach could have been made to the government, which often gave subsidies and grants for development work in addition to exploration subsidies. The Mines Department would probably have recommended favourably on such an application for a subsidy as this was the only discovery of any significance ever to eventuate from the government-subsidised prospecting scheme: the government would have been keen to promote any success which confirmed the efficacy of their programme.

¹⁵ *Vide* detail in Hill, "The Little Man" David Ziman, pp. 216-219.

¹⁶ Salmon, *A History of Goldmining in New Zealand*, p. 221.

¹⁷ Latham, *The Golden Reefs*, p. 313. When the mine closed in 1951, the reef which had been mined to a depth of more than half a mile was still persisting underfoot. With a depth of 2,759 feet, the Prohibition shaft on the mine was the deepest shaft in New Zealand. See Salmon, *A History of Goldmining in New Zealand*, p. 225.

¹⁸ Although Kingswell found the reef to be widening to six-and-a-half feet at a fairly shallow depth, the reef as eventually mined turned out to be much narrower overall. *Vide* note 22.

¹⁹ J.F. Downey, *Quartz Reefs of the West Coast Mining District, New Zealand*, Wellington 1928, p. 56.

²⁰ The board of Blackwater Mines Ltd comprised the same directors as all the companies in the CGFNZ group – Sir Westby Perceval (chairman), David Ziman (the original promoter of CGFNZ), George Jones and Arthur Foster. All were resident in London. Latham, *The Golden Reefs*, p. 313, says Ludwig Ehrlich was a director, but although he was on the board until his death in 1942, Ehrlich was not appointed until 1912.

²¹ Editorial Staff of 'Chemical Engineering and Mining Review,' *Mining Handbook of Australia*, Sydney, 1936, p. 126.

²² 'Flotation of the Blackwater Mine,' *Mining World & Engineering Record*, London, 26 January 1907, p. 106.

²³ The company's profitability was also constrained to some extent by the narrowness of the Birthday (or Blackwater as it became known) reef, which necessitated a large amount of development work opening up each level of the mine. Although of a mineable width, this great reef could have been mined much more profitably if it had only been a quarter as long, but four times as wide. According to Barry, *The History and Mineral Resources of the Reefion Goldfield*, p. 50, overall the reef turned out to be 1,067 metres long, but only 61 metres wide.

²⁴ The story of the development of the mine is detailed in 'New Zealand Gold Mines. A Quarter's Review,' *Mining World & Engineering Record*, London. 7 November, 1908, p. 586; Morris, *Waiuta. The Gold Mine*, pp. 6-10; R.H. Henderson, *Friends in Chains*, Wellington 1961, p. 160, *passim*; and 'A Brief Description of the Blackwater Mine from the date of discovery to September 30, 1910,' pp. 110-118 of 'E.W. Spencer letterbook,' loc. in box 26 of the CGFNZ collection in the Alexander Turnbull Library, Wellington.

²⁵ *Vide* the company's production and dividend statistics over its life in Appendix I.

Appendix

Production and dividend statistics of Blackwater Mines Ltd over the life of the mine

Year	Ore Milled (Long Tons)	Gold Bullion Won (Troy Ounces)	Approximate Dividends	
			£	%
1908	9,169	4,681	NIL	
1909	29,955	19,088	£12,500	5
1910	39,192	23,369	£37,500	15
1911	44,038	23,557	£37,500	15
1912	11,538	6,844	NIL	
1913	45,053	20,940	£12,500	5
1914	50,426	23,400	£12,500	5
1915	54,643	27,097	£25,000	10
1916	40,247	19,520	£25,000	10
1917	34,417	15,500	NIL	
1918	31,728	15,325	£12,500	5
1919	24,969	12,005	NIL	
1920	24,488	11,065	NIL	
1921	34,323	13,830	NIL	
1922	40,092	19,479	NIL	
1923	39,730	19,296	NIL	
1924	38,140	18,550	NIL	
1925	37,939	18,604	£12,500	5
1926	40,044	18,032	£6,250	2
1927	41,362	17,557	NIL	
1928	39,907	16,609	NIL	
1929	37,744	16,201	NIL	
1930	41,112	17,781	NIL	
1931	43,815	21,188	£18,750	7
1932	41,402	24,474	£31,250	12
1933	45,366	22,622	£31,250	12
1934	31,862	16,103	£25,000	10
1935	45,660	21,216	£25,000	10
1936	41,990	19,024	£25,000	10
1937	41,333	18,304	£12,500	5
1938	43,506	19,465	£18,750	7
1939	49,482	26,442	£18,750	7
1940	49,020	24,795	£25,000	10
1941	39,555	20,468	£18,750	7
1942	42,676	18,981	£15,625	6
1943	36,721	17,246	£10,416	4
1944	31,604	14,160	£4,126	1
1945	24,387	11,090	NIL	
1946	21,448	8,006	NIL	
1947	22,915	8,167	NIL	
1948	24,328	9,977	NIL	
1949	22,115	9,540	NIL	
1950	20,911	7,390	NIL	
1951	7,128	3,416	NIL	

Source: Based on table 'Production and Employment Statistics for the Blackwater Mine,' in Gerard Morris (ed.), *Waiuta. The Gold Mine. The Town. The People*, Reefton, 1986, p. 122.