

THE EUREKA MINE AT WAIORONGOMAI

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Te Aroha Mining District Working Papers

No. 85

2016

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ISSN: 2463-6266

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THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

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Abstract: *High on the mountainside, the Eureka was developed by two experienced miners for two and a half years before its ore was first crushed. Its owners were sustained during that long wait by anticipations that their ore was payable, working steadily and erecting an aerial tramway to link with the county tramway. A company, typically under-capitalized, was formed to meet expenses.*

After the ore was first treated, in mid-1884, it quickly proved to be unpayable, and the mine was sold to the Battery Company, which abandoned it in the following year. The fundamental problem was that the gold was so fine that only 35 per cent was saved when treated. During the mining boom of the 1890s, when the Great Western Company reworked the ground, erecting another aerial tramway and a small battery, once again the mine proved unprofitable and was quickly abandoned.

INTRODUCTION

At 2,500 feet above sea level, the Eureka was 500 yards west of the New Find¹ and about ten or twelve chains away from the main reef, making it amongst the highest of the Waiorongomai claims.² First applied for on 9 December 1881 by Charles Henry Bennett,³ when registered as a five-acre licensed holding on 31 January 1882 he had as partners James Richard Shaw Wilson, Thomas Frederick Fenton, and James Stevenson.⁴ ‘Gold was first seen in stone broken out of the cap of the reef outcropping in the creek below the whare’ in which Bennett and Wilson lived for two and a half years. During that time, these two men did almost all the development,⁵ waiting for the day when they could treat their quartz and, at last, receive a return.

¹ See paper on this claim.

² *AJHR*, 1882, H-19, p.16; *Thames Advertiser*, 31 January 1882, p. 2; S. Herbert Cox, ‘Gold Fields of the Cape Colville Peninsula’, in *Reports of Geological Explorations During 1882* (Wellington, 1883), pp. 16, 38.

³ Te Aroha Warden’s Court, Register of Applications 1880-1882, folio 115, BBAV 11505/3a, ANZ-A.

⁴ Te Aroha Warden’s Court, Register of Licensed Holdings 1881-1887, folio 26, BBAV 11500/9a, ANZ-A.

⁵ *Te Aroha News*, 1 December 1883, p. 2.

THE SHAREHOLDERS

Unlike many involved in the Te Aroha and Waiorongomai rushes, the shareholders were all experienced miners. Bennett, born in 1846,⁶ arrived in Auckland with his family in the early 1860s, and in October 1867, when aged 21, joined the Thames gold rush.⁷ His father was living at Thames at the time also, and as they shared the same names, it is uncertain which of them traded in shares in 1868 and 1869; but as his father was in the liquor trade, it was unlikely that he was the working partner in the *Star of the West* in July 1868.⁸ Bennett then went to California, presumably to mine there, and in about 1871 arrived on the Coromandel goldfield.⁹ In 1879 he was a member of the *Pride of Tokatea* tribute and of a party mining in the *Invicta*.¹⁰ He was a mine manager for Barrett's Company at Tiki until obtaining a miner's right for Waiorongomai on 24 November 1881.¹¹ There he was a shareholder in the *Young Colonial*, *Queen*, and *Victoria* as well as the *Eureka*.¹² He held 19 1/2 of the 30 shares in the *Eureka*, selling two for

⁶ Ancestry.co.uk; his death certificate gave the wrong age, making him 14 or 15 in 1867: Death Certificate of Charles Henry Bennett, 7 April 1917, 1917/1989, BDM; correct age given in Coromandel Rifle Volunteers, Nominal Roll Book 1879-1890, no. 66, ZAAP A249/162, ANZ-A.

⁷ Register of Land Grants for Immigrants 1863-1868, folio 161, nos. 2160-2162, Lands and Survey Department, BAAZ 4115/1c; Thames Warden's Court, Register of Miners' Rights 1867-1868, no. 728, issued 4 October 1867, BACL 14358/1a, ANZ-A.

⁸ Thames Magistrate's Court, Notebook October-December 1869, Scherff v. Fernandez, 14 December 1869, BACL 14457/1d; Thames Warden's Court, Register of Agreements and Licenses 1868-1870, folio 126, BACL 14417/1a; Thames Claims Register 1868, nos. 618, 690, 694, 704, BACL 14397/2a; Thames Claims Register 1868-1869, no. 1349, BACL 14397/3a, ANZ-A.

⁹ *Coromandel County News*, 13 April 1917, p. 2.

¹⁰ Bank of New Zealand, Coromandel Branch, Gold Dealer's Register 1874-1890, entries for 18 June 1879, 4 November 1879, Bank of New Zealand Archives, Wellington.

¹¹ *Thames Advertiser*, 23 May 1876, p. 5; *Coromandel Mail*, 9 April 1881, p. 4, 18 June 1881, p. 5; *New Zealand Gazette*, 14 July 1881, p. 912; *Thames Star*, 18 October 1881, p. 2; Te Aroha Warden's Court, Miner's Right no. 1881, issued 24 November 1881, Miners' Rights Butt Book 1881-1882, BBAV 11533/1i, ANZ-A.

¹² Te Aroha Warden's Court, Register of Licensed Holdings 1881-1887, folios 2, 39, 45, BBAV 11500/9a, ANZ-A.

£50 on 16 February and three for £20 on 1 April, retaining the remainder until they were all transferred to the Eureka Company on 20 May 1882.¹³ After mining at Waiorongomai he returned to Coromandel, where from 1884 to 1890 and perhaps longer he headed the party working the Bachelor's claim (he was indeed a bachelor), and worked in other mines.¹⁴ From the 1890s onwards he was a mine manager at Kuaotunu.¹⁵ He also served for many years on the Coromandel County Council from 1886, being its chairman from 1887 to 1888 and from 1914 to 1916.¹⁶ He was remembered as being 'extremely cautious and strong-minded';¹⁷ the second quality would have motivated him to persist in developing the Eureka for so long despite no return.

Wilson, who managed the Eureka,¹⁸ had been born in 1845, and was the only shareholder to be married.¹⁹ When he went to live on the claim in 1882, he had a two-year-old son; he visited his family on weekends, and another son was born in July 1883.²⁰ His first miner's right was issued at Thames on 21 November 1867, and after mining there he moved to Coromandel.²¹ He next moved to Waiorongomai, his miner's right being

¹³ Te Aroha Warden's Court, Register of Licensed Holdings 1881-1887, folio 26, BBAV, 11500/9a; Transfers and Assignments 1882, nos. 49, 215, BBAV 11581/1a, ANZ-A.

¹⁴ Bank of New Zealand, Coromandel Branch, Gold Dealer's Register 1874-1890, entries for 22 November 1884, 7 April 1884, 31 July 1886, 13 December 1886, 28 January 1887, 7 April 1887, 29 October 1887, 7 December 1888, 7 December 1889, 30 June 1890, Bank of New Zealand Archives, Wellington; Mines Department, MD 1, 92/666, ANZ-W.

¹⁵ See *Thames Advertiser*, 12 October 1898, p. 4; *Thames Star*, 5 May 1900, p. 4; *Coromandel County News*, 13 April 1917, p. 2.

¹⁶ *Coromandel County Diamond Jubilee 1876-1936* (Paeroa, 1937), pp. 4, 7.

¹⁷ *Coromandel County Diamond Jubilee*, p. 67.

¹⁸ *Thames Advertiser*, 13 November 1882, p. 3.

¹⁹ Ancestry.co.uk; Notices of Intentions to Marry, Births Deaths and Marriages, BDM 20/23, folio 223, ANZ-W; Marriage Certificate of James R.S. Wilson, 19 March 1878, 1878/189; Birth Certificate of William George Wilson, 7 June 1885, 1885/5771, BDM.

²⁰ Birth Certificates of James Wilson, 28 March 1879, 1879/517; Thomas Isaac Wilson, 6 July 1883, 1883/10475, BDM.

²¹ Thames Warden's Court, Miners' Rights Register 1867-1868, no. 2290, BACL 14358/1a; Thames Claims Register 1869, no. 1800, BACL 14397/4a; Register of Agreements and Licenses 1868-1870, folio 241, BACL 14417/1a; Coromandel Warden's Court, Lease Record Book 1869-1874, folios 112-113, ZAAAN 14303/2a, ANZ-A; *Coromandel Mail*, 14

issued on 4 February 1882.²² He had five of the 30 shares in the Eureka, selling three for £100 before the others were transferred to the company.²³ From 1884 to 1885, he was manager of the Te Aroha Prospecting Association until leaving for Thames; he then briefly managed one of the first mines at Tui before mining at Thames, Coromandel, and Kuaotunu.²⁴ A mine manager for many years, he contracted miner's complaint and died after a long illness in 1901.²⁵

Fenton came to Waiorongomai just over a month after Hone Werahiko²⁶ made his find, taking out a miner's right on 30 November 1881.²⁷ Born in 1854,²⁸ he had been on the Thames and Coromandel goldfields in 1869 and remained at Coromandel until settling at Waiorongomai.²⁹ Allotted five of the 30 shares in the Eureka, he sold one for

April 1874, p. 3; Bank of New Zealand, Coromandel Branch, Gold Dealer's Register 1874-1890, entry for 24 December 1880, Bank of New Zealand Archives, Wellington.

²² *New Zealand Gazette*, 11 August 1881, p. 1068; Coromandel Warden's Court, Applications for Sites 1870-1890, 31/1881, ZAAP 15150/1a; Te Aroha Warden's Court, Miners' Rights Butt Book 1881-1883, BBAV 11533/1i, ANZ-A.

²³ Te Aroha Warden's Court, Register of Licensed Holdings 1881-1887, folio 26, BBAV 11500/9a; Transfers and Assignments 1882, nos. 241, 242, 258, BBAV 11581/1a, ANZ-A.

²⁴ *Thames Star*, 3 December 1884, p. 2; Te Aroha Correspondent, *Thames Advertiser*, 13 August 1885, p. 3; *Te Aroha News*, 17 April 1886, p. 2; Bank of New Zealand, Coromandel Branch, Gold Dealer's Register 1874-1890, entries for 2 August 1886, 1 April 1887, Bank of New Zealand Archives, Wellington; Inspector of Mines, Thames, Letterbook 1888-1892, folio 54, YBAZ 1240/1, ANZ-A; *New Zealand Gazette*, 3 October 1895, p. 1574, 15 October 1896, p. 1723; R.A. Simpson, *This is Kuaotunu*, rev. ed. (Kuaotunu, 1979), p. 47.

²⁵ Death Certificate of James Richard Shaw Wilson, 18 December 1901, 1902/116, BDM; *Coromandel County News*, 13 December 1901, p. 3; *Thames Star*, 17 December 1901, p. 2.

²⁶ See paper on his life.

²⁷ Te Aroha Warden's Court, Miner's Right no. 1827, Miners' Rights Butt Book 1881-1882, BBAV 11533/1i, ANZ-A.

²⁸ Ancestry.co.uk; Marriage Certificate of Thomas Frederick Fenton, 25 March 1895, 1895/1585, BDM.

²⁹ *Auckland Provisional Government Gazette*, 15 September 1869, p. 1043; Thames Scottish Rifles, Nominal Roll, Army Department, ARM 41, 1882/1w, ANZ-W; Coromandel Warden's Court, Register of Claims 1868-1872, no. 164, BAAC 144396/1a, ANZ-A; Te Aroha Correspondent, *Thames Advertiser*, 13 January 1882, p. 3.

£35 and bought one for £16 before the remainder went to the company.³⁰ He had shares in many other Waiorongomai claims.³¹ After a brief period at Karangahake in the mid-1880s, he moved to Reefton, where from 1886 to 1890 he taught at the School of Mines.³² He then became a stockbroker and auctioneer, and from 1892 to 1898 was legal manager of the Big River Quartz Mining Company, having earlier been a director.³³ In 1895, when at the age of 41 he married an 18-year-old, he gave his occupation as auctioneer.³⁴ In 1905 and 1906, when a ‘gentleman’ living in Auckland and Western Australia, he was briefly involved in the unsuccessful Westralia claim at Waiorongomai.³⁵ He died in Western Australia in 1907.³⁶

Stevenson held only half of one share, or a one-sixtieth interest, selling it to Fenton on 22 March 1882 for £16,³⁷ and afterwards having no further involvement. He was briefly involved in other mines in the district, for instance, owning the Dauntless for 16 days in February that year.³⁸ Before obtaining a miner’s right at Waiorongomai on 8 December 1881,³⁹ he had mined at Thames from 1867 onwards and at Coromandel from the early

³⁰ Te Aroha Warden’s Court, Register of Licensed Holdings 1881-1887, folio 26, BBAV 11500/9a; Transfers and Assignments 1882, nos. 75, 150, BBAV 11581/1a, ANZ-A.

³¹ See, for example, Te Aroha Warden’s Court, Register of Licensed Holdings 1881-1887, folios 14, 39, 76-78, BBAV 11500/9a, ANZ-A.

³² *Te Aroha News*, 28 November 1885, p. 7; *The Handbook of New Zealand Mines* (Wellington, 1887), Appendix, p. 4; Mines Department, MD 1, 87/499, ANZ-W; *New Zealand Gazette*, 7 July 1892, p. 1483, 23 February 1893, p. 271, 1 November 1894, p. 1634, 31 October 1895, p. 1734, 16 January 1896, pp. 84, 85, 88; 9 July 1896, p. 1098; Elaine E. Bolitho, *Reefton School of Mines 1886-1970: Stories of Jim Bolitho* (Reefton, 1999), pp. 34-39.

³³ Bolitho, pp. 46, 145, n. 28.

³⁴ Marriage Certificate of Thomas Frederick Fenton, 25 March 1895, 1895/1585, BDM.

³⁵ Te Aroha Warden’s Court, Mining Applications 1905, 6, 38/1905, BBAV 11289/18a, ANZ-A.

³⁶ Death Certificate of Thomas Frederick Fenton, 514/1907, Western Australian BDM.

³⁷ Te Aroha Warden’s Court, Register of Licensed Holdings 1881-1887, folio 26, BBAV 11500/9a; Transfers and Assignments 1882, no. 150, BBAV 11581/1a, ANZ-A.

³⁸ Te Aroha Warden’s Court, Register of Te Aroha Claims 1880-1888, folio 246, BBAV 11567/1a, ANZ-A.

³⁹ Te Aroha Warden’s Court, Miner’s Right no. 1840, Miners’ Rights Butt Book 1881-1882, BBAV 11533/1i, ANZ-A.

1870s.⁴⁰ After his brief involvement at Waiorongomai, he mined at Owharoa and Waihi and prospected at Waikawau before going to the South African mines in 1889.⁴¹

DEVELOPING THE MINE

Early in January 1882, a *Thames Advertiser* correspondent struggled up the partly made upper road. When their horses could go no further, they were tethered and the visitors climbed through the bush for about half an hour to the Eureka:

This claim is situated next the Coquette, which is on the south-west of the Diamond Gully. The reef is supposed to junction with the big reef in the last named claim, and is usually about five feet in thickness. We were shown over the ground by the proprietors, and tested the reef for a length of four chains. Gold was visible in different parts of the lode, and good prospects were obtained from every dish of stuff. A Victorian miner of experience who accompanied me from the Thames, had visited this claim and the New Find on the previous day, and pronounced the show in the Eureka to be the best.⁴²

When another correspondent, probably Charles Featherstone Mitchell,⁴³ visited at the beginning of February he met several ‘mining celebrities’. They examined the outcrop, and from ‘a parcel’ broken out of it ‘picked up innumerable pieces of quartz showing blotches of fine gold, and a dish of stuff broken out from the lode and panned off in my presence gave a

⁴⁰ Thames Warden’s Court, Register of Miners’ Rights 1867-1868, no. 1751, BACL 14358/1a; Thames Claims Register 1868, folio 178, BACL 14397/1a; Thames Claims Register 1869, folio 1733, BACL 14397/4a, ANZ-A; *Coromandel Mail*, 16 May 1874, p. 3; *Thames Advertiser*, 26 January 1876, p. 2; Coromandel Warden’s Court, Register of Claims 1872-1885, folio 39, ZAAAN 14044/1a, ANZ-A; *New Zealand Gazette*, 20 October 1881, p. 1331.

⁴¹ See in particular *Thames Advertiser*, 27 July 1885, p. 3, 11 May 1886, p. 2, 10 March 1887, p. 2, 31 January 1889, p. 2; Ohinemuri Correspondent, *Te Aroha News*, 26 February 1886, p. 2; *Thames Star*, 21 October 1889, p. 2; *Coromandel County News*, 22 August 1890, p. 4.

⁴² Own Correspondent, ‘Te Aroha Goldfield’, *Thames Advertiser*, 13 January 1882, p. 3.

⁴³ See paper on the Thames Miners’ Union.

fair prospect of the precious metal'.⁴⁴ A local correspondent wrote that 'Tom Fenton and his mates are considered to have one of the best shows'.⁴⁵ The main reef was the New Find No. 2 reef.⁴⁶ Optimism about the prospects meant the partners spent two and a half years opening up their mine; possibly they earned some money working in other claims, for until the battery commenced their claim did not provide any financial return.

Later in February, they started to sink a winze on the reef, which improved as it went down.⁴⁷ By the end of the month, a reef about four feet thick intersecting the buck reef was cut, and prospects were 'very fine. About forty tons of general stuff, which would average about 2oz to the ton, as well as some two tons of picked stone, which is expected to give a much larger return, lie above ground'.⁴⁸ A geologist who inspected the workings that month commended their 'praiseworthy energy'.⁴⁹ Another visitor in late February recorded his impressions:

I arrived after a very hard climb; and after taking rest for some time, we proceeded to prospect on this line of reef. This reef is quite distinct from that where the Maori [Hone Werahiko] first discovered the gold which is known as the new find. This reef is now showing for several chains in length quite bare, and after trying pestle-and-mortar tests from the cap for two or three chains in length, I then tried several more from a winze now being sunk about 8 feet deep on a reef about 3 feet 6 inches wide, and in every test found the precious metal, although in most instances I chose the stone in which I could not see any gold, the reef in the winze, I think, giving the best test. Evening then coming on, I was kindly treated with a good supper and bed for the night by Mr Fenton and his mates.⁵⁰

⁴⁴ Paeroa Correspondent, *Thames Advertiser*, 4 February 1882, p. 3.

⁴⁵ Te Aroha Correspondent, *Auckland Weekly News*, 21 January 1882, p. 9.

⁴⁶ James Coutts to Under-Secretary, Mines Department, 18 April 1898, *AJHR*, 1898, C-3A, p. 53.

⁴⁷ *Thames Advertiser*, 20 February 1882, p. 3.

⁴⁸ *Waikato Times*, 28 February 1882, p. 2.

⁴⁹ Cox, p. 38.

⁵⁰ 'A Miner', 'My Visit to Te Aroha', *Auckland Weekly News*, 4 March 1882, p. 11.

For better access, the partners constructed a track, part of the cost being met by a council grant of £10.⁵¹ Early in April, they were ‘still taking out good payable stone’.⁵²

The lucky shareholders of this little claim are still sinking, and evidently the deeper they sink the better the gold. The reef is a well-defined body of stone, measuring four feet in width, and can be traced almost the entire length of the ground. A trial crushing of a few tons taken from the shaft is contemplated.⁵³

When the winze had been sunk 30 feet, it was estimated the quartz would yield an ounce to the ton.⁵⁴ Two tons crushed at Thames produced 3oz 8dwt of gold, ‘a result which may be considered eminently satisfactory as the first test of any magnitude from this promising district’.⁵⁵ Another newspaper gave the result as 3oz 4dwt, or 1oz 12 dwt per ton, valued at £2 14s 8d an ounce. As this ore had ‘been taken promiscuously’ from a four-foot reef, ‘a prosperous future’ was forecast.⁵⁶ The eight ounces of amalgam ‘gave 3oz 8dwt retorted gold, losing 5dwt in the melting. The stuff sent down was not picked, and was treated merely for the private information of shareholders. The amalgam was squeezed in hot water’.⁵⁷ The warden, Harry Kenrick,⁵⁸ noted ‘good results’ from every test made, but wisely warned that ‘all tests short of the battery are more or less unreliable’.⁵⁹

At the end of April, a drive was started to give backs of 100 feet.⁶⁰ Being driven on the reef, a crosscut was not necessary, ‘as the lode outcrops, consequently every foot of driving will prove the reef’. When under the surface workings it would provide 160 feet of backs.⁶¹ A later estimate was

⁵¹ Piako County Council, Minutes of Meeting of 3 March 1882, Matamata-Piako District Council Archives, Te Aroha.

⁵² *Thames Advertiser*, 10 April 1882, p. 3.

⁵³ Te Aroha Correspondent, *Waikato Times*, 6 April 1882, p. 2.

⁵⁴ James M. McLaren, Mining Inspector, to Under-Secretary, Gold Fields, 12 May 1882, *AJHR*, 1882, H-19, p. 16.

⁵⁵ *Thames Advertiser*, 17 April 1882, p. 3, 25 April 1882, p. 3.

⁵⁶ *Waikato Times*, 27 April 1882, p. 2; see also *Thames Star*, 28 April 1882, p. 2.

⁵⁷ *Te Aroha News*, 1 December 1883, p. 2.

⁵⁸ See paper on his life.

⁵⁹ Harry Kenrick to Under-Secretary, Gold Fields, 18 April 1882, *AJHR*, 1882, H-19, p. 11.

⁶⁰ *Thames Advertiser*, 29 April 1882, p. 3.

⁶¹ *Waikato Times*, 18 May 1882, p. 2.

from 200 to 300 feet of backs.⁶² When 30 feet in, the ground was very hard, but 20 feet further on there was expected to be softer rock, the reef there being six feet wide with 'gold visible in the stone'.⁶³ Dynamite was required for the hardest rock, but in easier country blasting powder was used.⁶⁴ By the end of October it had attained 120 feet; 60 feet of the reef had been stripped, revealing 'payable prospects all through'. It was now estimated there would be at least 200 feet of payable stone, giving 120 feet of backs. 'The reef will be left standing until the hopper is finished. Another hole will be put through the reef in a few days'.⁶⁵ A hopper would be erected at the portal, and a 'substantial tramway' was being constructed to it.⁶⁶ On 11 November, Wilson reported payable gold in the low level,

although I have not seen any in the quartz as yet, but the prospects are good. I should think it would average from 10 to 15dwt the ton. I have only broken down one truck of quartz. The lode will be very easily worked, and after all the dead work is done, I could keep all the batteries on the field going with six men. I have driven thirty-six feet and laid a tramway.

The total distance driven was 133 feet, leaving 142 more to be driven to get under the winze. 'If things improve as we go in, which I am sure they will, you will have a real good mine - one that will pay dividends for years to come'.⁶⁷ By mid-December, it was in 190 feet, 'the deepest on the field on payable gold'. Another 90 feet would bring it 'under the winze from which the crushing was taken', indicating that no further parcels had been tested to prove the ore was as good as was assumed. 'A nice two-foot gold-bearing leader was cut 180 feet from the mouth of the drive. This leader has been traced on the surface from its junction with the Eureka reef up to the Victoria boundary, carrying payable gold all the way'.⁶⁸

On 20 March 1883, a great deal of wasted effort was revealed:

⁶² *Thames Star*, 3 July 1882, p. 2.

⁶³ *Te Aroha Mail*, 10 June 1882, p. 3.

⁶⁴ *Thames Advertiser*, 27 May 1882, p. 3.

⁶⁵ *Te Aroha Mail*, n.d., reprinted in *Thames Star*, 31 October 1882, p. 2.

⁶⁶ *Thames Advertiser*, 30 October 1882, p. 3.

⁶⁷ *Auckland Weekly News*, 25 November 1882, p. 9.

⁶⁸ *Thames Advertiser*, 16 December 1882, p. 3.

The low level which was driven on the reef was continued on a branch of the main reef running more to the westward than the lode on which the winze was sunk. This mistake was not found out until the surveyor had been notified of the direction the drive was going. Subsequently, by his advice, a cross-cut was put in to intersect the main reef. As the country was hard at the place where the junction occurred, it was thought better to crosscut the reef than to come back to the junction and drive along it. This crosscut is being driven in kindly country, and there is every indication of the reef being close at hand.⁶⁹

One reporter later blamed this 'very unnecessary work' on 'not having a proper survey of the workings in the first instance'.⁷⁰ Another explained that 'for a portion of the distance' the reef was 'left in the wall to expedite progress'. After striking this quartz, Wilson, 'thinking that he had found the reef', drove '76 feet along a good body of quartz, which showed gold freely', before discovering 'he was on the wrong lode'.⁷¹ According to another account, after following this branch reef for over 100 feet the low level ended in very hard quartz with a very wet roof, necessitating the crosscut being started about 70 feet from the face. By mid-April, after 60 feet of driving the crosscut through hard rock, the original reef was struck, which the low level once more followed towards the winze on the hanging-wall. The 'easily worked' quartz contained gold 'in every prospect tried', but because there was no paddock it was not saved. Although it would take some time to get under the winze, it was 'very encouraging to find so much of the quartz gold-bearing at such a distance from the run already proved'.⁷²

Kenrick noted that it would be 'a considerable time' before the drive and winze were connected and until then no quartz could be sent down.⁷³ By May, the quartz was improving in appearance, 'gold being frequently seen in the stone' and 'fair prospects' obtained 'by pounding'.⁷⁴ In early June, the low level was in 262 feet; after driving another 16 feet, Wilson would rise to connect with the winze. 'Gold has been seen in the low level for a distance of 30 feet, and appears to be improving as the drive is pushed

⁶⁹ *Waikato Times*, 20 March 1883, p. 3.

⁷⁰ Special Reporter, *Thames Advertiser*, 11 December 1883, p. 3.

⁷¹ Special Reporter, *Thames Star*, 14 December 1883, p. 2.

⁷² *Waikato Times*, 17 April 1883, p. 2.

⁷³ Harry Kenrick to Under-Secretary, Gold Fields, 19 April 1883, *AJHR*, 1883, H-5, p. 16.

⁷⁴ *Waikato Times*, 1 May 1883, p. 2.

ahead'.⁷⁵ About four feet of the reef contained quartz in which gold was 'frequently visible throughout', estimated to contain at least one ounce per ton.⁷⁶ One month later, it was once more announced that the ore was payable and that the miners were almost ready to rise to meet the winze.⁷⁷ No more driving would be done until this connection was made from where the low level was in 275 feet.⁷⁸

By late October, the rise was up 34 feet, and the winze down 45, with 'very good crushing dirt coming to hand every breaking down. Shareholders may be confident of getting splendid crushing stuff from up hill side of the rise, there being good gold showing all the way down the winze'.⁷⁹ A month later, the *Waikato Times* wrote that, as was 'well-known', there was 'an unlimited supply of gold bearing quartz'.⁸⁰ By then both the rise and the winze had been driven 47 feet, and the manager reported gold 'still showing freely in the stuff broken out'. There remained about 38 feet between the rise and the winze, according to the surveyor, Daniel Henry Bayldon;⁸¹ he expected to connect them before the Christmas holidays'.⁸²

On 1 December, the *Te Aroha News* published a long account of the mine and its prospects:

Visitors going to the Eureka mine find themselves not only at the furthest developed end of the New Find reef, but as it were, at the end of civilisation in this direction. Here is the whare of Messrs Bennett and Wilson, whose work shows what Te Aroha miners can accomplish. In this at present lonesome spot they have been toiling for two years without the incentive which claims more conveniently situated to the road receive, through the visits of persons interested in the progress of work, but they had a still better incentive in the knowledge of being on a payable lode which averages four feet wide, and it was this fact and the frequent dabs of gold in the stone which led them to do the amount of work which has been accomplished, chiefly by two men. In all there has been done 350 feet of driving, 65 feet of a rise, and a winze is down 50 feet. When the rise is through, a

⁷⁵ *Te Aroha News*, 9 June 1883, p. 2.

⁷⁶ *Waikato Times*, 5 June 1883, p. 2.

⁷⁷ *Thames Advertiser*, 10 July 1883, p. 2.

⁷⁸ *Waikato Times*, 19 July 1883, p. 3; *Thames Advertiser*, 7 September 1883, p. 3.

⁷⁹ *Waikato Times*, 23 October 1883, p. 2.

⁸⁰ *Waikato Times*, 27 November 1883, p. 2.

⁸¹ See paper on the New Find mine.

⁸² *Auckland Weekly News*, 17 November 1883, p. 9.

block of 150 feet of the reef will be opened, which will be through before the holidays, when a very large block of ground will be ready for stoping. In the low level the country is of a kindly character, nice easy shooting ground, and of the right class for carrying gold, which latter has been seen in the stone the whole way down, proving thereby the existence of the precious metal at a considerable distance from the surface. The reef carries good walls where cut through, and as it is now known to be the New Find reef, its satisfactory development at so distant a point, and at such a depth, gives additional testimony to the value of the lode.... Gold ... was seen for fifty feet down the winze, and is visible in stone now coming out of the rise.⁸³

Shortly afterwards, another reporter repeated the accepted view that this was one of the best reefs and anticipated the reef containing 200 feet of continuously payable ore.⁸⁴ Another reporter published his account two weeks later:

A large quantity of work has been done, and the shareholders are deserving of success for the steady way they have pushed on operations. The reef is a branch of the New Find lode, and strikes through the ground. Gold was seen in several places on the surface, and a low level, giving 150 feet of backs at the present face, and considerably more northward, had been driven 274 feet (there still being 300 feet to drive to reach the boundary) and a winze sunk 122 feet [the combined extent of the rise and winze] and connected with the low level at the face.... The reef [for the last 54 feet of the low level] was quite 5 feet thick, showing gold freely, and a prospect could be obtained from any stone tried. In the winze also the reef averages 5 feet, and is almost perpendicular. Here too the precious metal has been seen very freely right through the lode, and of a coarser quality than in the level, though this is accounted for by the fact that the level has not yet touched the run sunk through in the winze. The manager informed me that it was very rarely a prospect could not be obtained from even the most barren looking stone, and to satisfy myself I pounded up a piece of white stone in which neither gold nor mineral was visible to the eye, and on washing found several good specks of gold. There are 200 tons of dirt on hand, and from the way the mine is opened up, by putting a few men on, a large output of quartz could be obtained. The company has the right to

⁸³ *Te Aroha News*, 1 December 1883, p. 2.

⁸⁴ Special Reporter, *Thames Advertiser*, 11 December 1883, p. 3.

the use of 10 stamps at the battery, and the manager expects to be able to commence crushing in February.⁸⁵

By the end of December, the winze had connected with the rise and a block 140 feet in depth was ready for extraction. After the holidays an intermediate level would be driven from about halfway down the winze to permit stoping both ways on the reef. It was 'one of the best, if not the best, opened up mines', with 'a solid compact reef, averaging three feet six inches, and showing gold freely all the depth of the winze and on the floor of the low level drive'.⁸⁶

By the following February the intermediate level was being driven from 70 feet down the winze. No mine was 'better opened up ... thanks to the plodding perseverance of the shareholders and men, who have steadily stuck to it from the very commencement'.⁸⁷ 'Perhaps in no other claim' had mining 'been carried on more steadily and under greater difficulties'. Because of being opened up systematically, it would be cheap to operate.⁸⁸ 'Some good gold' was soon obtained from the intermediate level.⁸⁹ Concerns about costs prompted the decision to extend the low level drive with the assistance of the neighbouring Victoria Company; both companies would use it, creating big savings.⁹⁰ Early in May, the mine looked 'well', with 'some excellent stone' being taken out of the low level, 'showing strong dabs of gold now and then. The shareholders have the utmost faith in the mine turning out well', and there was 'every prospect of its becoming one of the best on the field'.⁹¹ Late that month, Wilson reported that the two men employed to drive the low level had 'have made very good progress, having done about 20 feet for the month. It is now in 50 feet from the rise. The ground has wonderfully improved, so far as working is concerned. The reef is about eight feet', but not all of it was payable. For nearly a month, three men had been driving the intermediate level northeast; it was now in 31 feet, where he would 'start a rise to enable me to get at the upper paddock of quartz. I expect to complete this next week, when I will be fully ready for

⁸⁵ Special Reporter, *Thames Star*, 14 December 1883, p. 2.

⁸⁶ *Auckland Weekly News*, 29 December 1883, p. 13.

⁸⁷ *Auckland Weekly News*, 2 February 1884, p. 13.

⁸⁸ *Te Aroha News*, 23 February 1884, p. 2.

⁸⁹ *Auckland Weekly News*, 23 February 1884, p. 19.

⁹⁰ *Te Aroha News*, 1 March 1884, p. 2.

⁹¹ *Waikato Times*, 6 May 1884, p. 2.

crushing. The reef in this drive looks very well, gold showing freely in the stone'.⁹²

CONNECTING THE MINE WITH THE TRAMWAY

Its remote location meant it was difficult to connect the mine with the county tramway. A May 1883 suggestion that it be 'connected by a self-acting line and a shoot at a point near the Diamond Gully workings' envisaged an incline tramway down the southern side of Diamond Gully to a chute going across the gully to meet the branch line from the top of the May Queen incline to the New Find hopper.⁹³ The cost would be 'considerable'.⁹⁴ In September, two months before the county tramway was completed, it was suggested that a 'self-acting tramway consisting of two grades could be easily made from the mouth of the low level to connect with' it.⁹⁵ Instead, in the following month Bayldon started surveying an aerial tramway to be linked to a large hopper to be built about two chains from the New Find one.⁹⁶ Wilson and Bayldon cut the lines for this 19-chain long tramway 'with a good workable grade, and the brakeman will be able to see the trucks the whole of the distance'.⁹⁷ In December, its length was given as 1,300 feet 'in one continuous section'; it would be completed in February.⁹⁸ Two hoppers would be built, one holding 60 tons and the other 90, and during December sawyers prepared the timber.⁹⁹ In January, four sawyers were cutting timber and two more were cutting the line, now estimated to be 1,350 feet long. The wire ropes had arrived and the necessary gear had been made at the battery.¹⁰⁰ The following month, 12 men were erecting it 'as fast as the rough character of the ground' allowed.¹⁰¹

⁹² *Auckland Weekly News*, 31 May 1884, p. 13.

⁹³ See paper on the New Find mine.

⁹⁴ *Waikato Times*, 8 May 1883, p. 2.

⁹⁵ *Thames Advertiser*, 7 September 1883, p. 3.

⁹⁶ *Waikato Times*, 23 October 1883, p. 2; *Te Aroha News*, 10 November 1883, p. 2.

⁹⁷ *Thames Advertiser*, 16 November 1883, p. 3; *Auckland Weekly News*, 17 November 1883, p. 9.

⁹⁸ *Thames Advertiser*, 11 December 1883, p. 3.

⁹⁹ *Thames Star*, 14 December 1883, p. 2.

¹⁰⁰ *Thames Advertiser*, 19 January 1884, p. 3.

¹⁰¹ *Te Aroha News*, 23 February 1884, p. 2; see also *Auckland Weekly News*, 23 February 1884, p. 19.

In March, the council agreed to extend its branch line 160 feet closer to Diamond Gully and to provide both rails and sleepers; the company would meet the cost and work under the tramway manager's supervision.¹⁰² By late April, the hopper at the end of the line was not completed and 'about a couple of chains of hard cutting' remained to do before rails could be laid.¹⁰³ Not till June, four months after the intended completion date, did the aerial tramway commence and was immediately declared a success, 'the capacity being equal to about 16 County trucks in a day of 8 hours', or 23 1/3 tons instead of the originally anticipated minimum of 30 tons.¹⁰⁴ 'A few slight alterations' were required.¹⁰⁵

As extending the county tramway was 'difficult and expensive', the Battery Company constructed it, for £500, to bring ore from the Eureka, Victoria, and Coquette claims.¹⁰⁶ The directors of the Eureka Company were proud of their financial acumen:

That these works have been accomplished without any money expenditure on the part of the company the directors consider creditable to the Board of Management, who, instead of making heavy calls to provide for these necessary works, induced the Battery Company to accept the company's reserve shares in payment.¹⁰⁷

EUREKA GOLD MINING COMPANY

Bennett and Wilson required financial backing to undertake the dead work needed to open up the ground and to employ extra labour. At a meeting held in Auckland on 26 April 1882, the rules of what was first called the Eureka Gold Mining Company were approved. Because of possible confusion with a company of the same name at Thames, 'Te Aroha' was added, but ignored in practice. This meeting was chaired by James

¹⁰² *Waikato Times*, 20 March 1884, p. 2.

¹⁰³ *Te Aroha News*, 26 April 1884, p. 2.

¹⁰⁴ *Waikato Times*, 14 June 1884, p. 2; *Te Aroha News*, 10 November 1883, p. 2.

¹⁰⁵ *Te Aroha News*, 28 June 1884, p. 2.

¹⁰⁶ *Thames Star*, 14 December 1883, p. 2; H.H. Adams to George Wilson, 16 February 1884, Te Aroha Warden's Court, Mining Applications 1884, BBAV 11289/10a, ANZ-A; *Auckland Weekly News*, 3 May 1884, p. 13.

¹⁰⁷ *Auckland Weekly News*, 3 May 1884, p. 13.

McCosh Clark,¹⁰⁸ of the Battery Company; as well as him, the directors were Josiah Clifton Firth,¹⁰⁹ of the same company; a clergyman-turned-merchant and mining speculator, William Reynolds Vines;¹¹⁰ Charles Stanislaus Stafford, joint owner with Henry Ernest Whitaker of the Wairakau Estate, upstream from Waiorongomai;¹¹¹ and Henry Pierce Hornibrook, a leading mine manager.¹¹² Vines was part-owner of four other claims and would soon be a shareholder in five other Waiorongomai companies.¹¹³ Stafford at this time had interests in eight other claims and three companies.¹¹⁴ Hornibrook mostly mined at Coromandel,¹¹⁵ and had no other interests at Waiorongomai at this time, although in December the following year he would become sole owner of one unimportant claim.¹¹⁶

On 15 May, the company applied for registration. Its capital was £20,000, in £1 shares; 5,000 shares were kept in trust for the company, and of the remainder 2,000 were paid up (these exactly matched the number of shares held in the names of Firth and Clark,¹¹⁷ meaning the Battery Company). By gifting the Battery Company ten per cent of its shares, it gained the right to use ten of the stamps.¹¹⁸ Firth bought shares in his name in various mining claims and companies; before this one was formed, he bought one of the original 30 shares on 3 April for £60 (which meant a

¹⁰⁸ See paper on the Battery Company

¹⁰⁹ See paper on the Battery Company.

¹¹⁰ See *New Zealand Herald*, 17 November 1897, p. 4.

¹¹¹ See paper on Harry and Charles: Henry Ernest Whitaker and Charles Stanislaus Stafford.

¹¹² Company Files, BBAE 10286/10b, ANZ-A.

¹¹³ Te Aroha Warden's Court, Register of Licensed Holdings 1881-1887, folios 1, 6, 8, 39, BBAV 11500/9a, ANZ-A; *New Zealand Gazette*, 22 June 1862, p. 895, 13 July 1882, p. 961, 10 August 1882, p. 1101, 2 November 1882, p. 1616, 16 November 1882, p. 1733.

¹¹⁴ Te Aroha Warden's Court, Register of Te Aroha Claims 1880-1888, folios 1, 16, 19, 20, 21, 46, 53, 54, BBAV 11567/1a; Register of Licensed Holdings 1881-1887, folio 107, BBAV 11500/9a, ANZ-A; *New Zealand Gazette*, 23 March 1882, p. 490, 27 April 1882, p. 646.

¹¹⁵ See *Cyclopedia of New Zealand*, vol. 2, pp. 489-490; *Coromandel County News*, 25 April 1919, p. 2.

¹¹⁶ Te Aroha Warden's Court, Register of Licensed Holdings 1881-1887, folio 182, BBAV 11500/9a, ANZ-A.

¹¹⁷ *New Zealand Gazette*, 18 May 1882, p. 728.

¹¹⁸ *Waikato Times*, 27 November 1883, p. 2; *Auckland Weekly News*, 23 February 1884, p. 19.

massive profit to the sharebroker, who had bought three for £20 on 1 April).¹¹⁹ Later, Firth explained he held shares in his name 'to suit the technical wishes of the Warden'.¹²⁰ His interest was duly transferred to the company.¹²¹ Clark also acquired interests for the same purpose.¹²²

In addition to Firth and Clark, there were 17 other shareholders. Vines and Thomas Murray each gave their occupation as 'gentleman', implying that they had no need to earn a living: in fact, Vines was a merchant,¹²³ and Murray a farmer.¹²⁴ Of the two merchants, John Abbott was really a moneylender.¹²⁵ There were four farmers, and the four miners were Bennett, Wilson, Fenton, and Hornibrook. There was a brewer, a clerk, a solicitor, a surveyor, and the legal manager of the company, Dennis Gilmore MacDonnell,¹²⁶ who held 125 shares; only one other shareholder had an equally small interest. Bennett held the highest number, 2,889; Wilson had 1,890 and Fenton 1,583, thus proving their confidence in the value of their claim. Including Firth and Clark, seven of the shareholders lived in Auckland, one (Hornibrook) at Coromandel, three at Waitoa, seven at Te Aroha, and Thomas William Carr,¹²⁷ whose residence was given as Gisborne, had in fact just moved to Te Aroha.¹²⁸

Before the company was formed, the highest sale recorded was £40 for one of the 30 shares in the claim.¹²⁹ Trading in scrip was only recorded between August 1883 and February 1884. In August, sales on the local

¹¹⁹ Te Aroha Warden's Court, Register of Licensed Holdings 1881-1887, folio 24, BBAV 11500/9a; Transfers and Assignments 1882, nos. 120, 226, BBAV 11581/1a, ANZ-A.

¹²⁰ J.C. Firth to George Wilson, 29 July 1887, Te Aroha Warden's Court, General Correspondence 1887, BBAV 11584/3b, ANZ-A.

¹²¹ Te Aroha Warden's Court, Transfers and Assignments 1882, no. 556, BBAV 11581/2a, ANZ-A.

¹²² See paper on the Battery Company.

¹²³ See *New Zealand Herald*, 17 November 1897, p. 4.

¹²⁴ See *Waikato Times*, 16 September 1882, p. 3, 25 January 1883, p. 3, 7 July 1884, p. 2; *New Zealand Herald*, 11 August 1899, p. 6.

¹²⁵ See *New Zealand Herald*, 18 January 1901, Monthly Survey, p. 1.

¹²⁶ See *Cyclopedia of New Zealand*, vol. 2, pp. 464-465; *New Zealand Herald*, 2 November 1908, p. 4; *Thames Star*, 2 November 1908, p. 2.

¹²⁷ See paper on his life.

¹²⁸ *New Zealand Gazette*, 18 May 1882, p. 728.

¹²⁹ *Auckland Weekly News*, 25 March 1882, p. 24.

sharemarket rose from 3s 3d to stabilize at 3s 6d.¹³⁰ Until November, there were sales in Te Aroha and Auckland at 3s 5d.¹³¹ The last sale recorded in Auckland was for 3s 3d in mid-February 1884.¹³²

As, like all Waiorongomai companies, it was under-capitalized, in November 1883 it sought more capital by offering shareholders 3,000 contributing shares. A deposit of 3s 6d per share was required, and if the number applied for exceeded 3,000 they would be allotted in proportion to shares already held.¹³³ It is not known how successful this offer was, but regular predictions of a valuable output must have helped. As well, calls of threepence per share were made in November 1882, July and December 1883, and March 1884, and on two other unrecorded occasions; in total 1s 6d was called up.¹³⁴

The only details published of the company's finances were given at the annual general meeting of 30 April 1884. During the year to March, receipts were £715 8s 9d and expenditure was £702 4s 5d; assets, exclusive of capital not called up, were £123 12s 10d, and liabilities were £33 19s.¹³⁵ The company was keeping afloat, but needed a good return from its first crushing to enable further development and paying any dividends. With 200 tons of ore already broken out, Wilson assured shareholders they had 'very good future prospects'.¹³⁶

ACQUIRING THE LITTLE AND GOOD

Money obtained through calls and selling most shares held in reserve paid for wages, opening up the mine, and purchasing an adjacent claim. When the aerial tramway was being constructed, the company sought approval for it to cross the Little and Good, Coquette, Diamond Gully, and

¹³⁰ *Te Aroha News*, 11 August 1883, p. 2, 18 August 1883, p. 2, 25 August 1883, p. 2; *Waikato Times*, 21 August 1883, p. 2, 28 August 1883, p. 2.

¹³¹ *Te Aroha News*, 29 September 1883, p. 2, 20 October 1883, p. 2, 10 November 1883, p. 2; *Auckland Weekly News*, 10 November 1883, p. 24.

¹³² *Auckland Weekly News*, 16 February 1884, p. 23.

¹³³ *Te Aroha News*, 17 November 1883, p. 3.

¹³⁴ *Thames Star*, 29 November 1882, p. 3; *Te Aroha News*, 28 July 1883, p. 3, 8 December 1883, p. 3, 29 March 1884, p. 7; Te Aroha Warden's Court, Mining Applications 1884, list of companies operating at Waiorongomai, BBAV 11591/1a, ANZ-A.

¹³⁵ *Thames Advertiser*, 1 May 1884, p. 2; *Waikato Times*, 1 May 1884, p. 2.

¹³⁶ *Te Aroha News*, 10 May 1884, p. 2.

Diamond Gully No. 2 claims. When the owner of the Little and Good, Edward Kersey Cooper,¹³⁷ objected, Kenrick granted the company's application on condition that workings in the Little and Good were not interfered with; compensation was to be paid to Cooper for any interference. A day later, presumably after Cooper appealed, he refused permission for it to cross his ground.¹³⁸ As this decision meant the company would not be able to use the nearly completed line, one month later it purchased all interests in Cooper's claim.¹³⁹

THE FIRST CRUSHING

By mid-1884, the mine was ready to send ore to the battery, where access to ten stampers was guaranteed. Both aerial and ground tramways were completed and the company was financially viable. Now came the moment to crush the ore that for two and a half years had been extolled as amongst the best on the field and to fulfil Wilson's forecast that there was 'every prospect of ten stampers being continuously employed for a long period on what promises to be payable quartz'.¹⁴⁰ The company anticipated sending 800 tons a month down.¹⁴¹ In the second week of June, the *Te Aroha News* reported the crushing was 'showing up most satisfactorily, and the amalgam already taken from the plates leaves no doubt that the stuff is highly payable'.¹⁴² The first monthly retorting produced 36oz 3dwt, a 'payable' return of an average of about one ounce a truck.¹⁴³ The next month produced 34oz 12dwt; as the ore was unpayable, crushing ceased and the staff was 'reduced'.¹⁴⁴ By the end of the month, the mine was 'practically abandoned'.¹⁴⁵ For a time some work continued, a contractor extending the

¹³⁷ See paper on his life.

¹³⁸ Te Aroha Warden's Court, Register of Applications 1883-1900, 22, 25/1884, BBAV 11505/1a; Plaint Book 1880-1898, 10/1884, BBAV 11547/1a, ANZ-A.

¹³⁹ Te Aroha Warden's Court, Register of Licensed Holdings 1881-1887, folio 41, BBAV 11505/9a, ANZ-A.

¹⁴⁰ *Thames Advertiser*, 1 May 1884, p. 2; see also George Wilson to Harry Kenrick, 8 April 1884, *AJHR*, 18 84, H-9, p. 21.

¹⁴¹ *Waikato Times*, 20 March 1884, p. 2.

¹⁴² *Te Aroha News*, 14 June 1884, p. 2; see also *Waikato Times*, 14 June 1884, p. 2.

¹⁴³ *Thames Star*, 26 June 1884, p. 2.

¹⁴⁴ *Thames Star*, 12 July 1884, p. 2, 19 July 1884, p. 4; *Te Aroha News*, 19 July 1884, p. 2.

¹⁴⁵ Piako County Council, *Waikato Times*, 2 August 1884, p. 3.

intermediate level by 50 feet early in August.¹⁴⁶ The return published in the middle of that month reported 78oz 16dwt had been obtained.¹⁴⁷

In mid-August it was decided to call a shareholders' meeting to consider winding up the company.¹⁴⁸ Held in Auckland late that month, after considering the financial position it resolved 'to invite tenders for the purchase of the mine.'¹⁴⁹ The Battery Company bought the property at an undisclosed but no doubt cheap price, prompting local discontent. At a public meeting at Te Aroha in February 1885, amongst the complaints made about Firth's role on the field was one by a future mayor, James Mills:¹⁵⁰ 'those present knew the process the Eureka mine had been put through, and then bought by the Battery Company for a mere song'.¹⁵¹

MANAGED BY THE BATTERY COMPANY

In mid-September 1884, the new owners appointed a new manager, Hugh Hill.¹⁵² Hill, a Thames miner, would be gassed in the Caledonian mine there 18 months later, aged 39.¹⁵³ Although 'prospects cannot be said to be very bright', the *Te Aroha News* 'hoped that something' would be made of it.¹⁵⁴ In October, 16 trucks yielded 8oz 10dwt, and in December nine gave 3oz 18dwt.¹⁵⁵ Reportedly a crushing at the start of February 1885 proved payable, the return for that month being 20oz 7dwt, and in March 29 trucks produced only 15 ounces.¹⁵⁶ A contract was let in April to break out 200 truckloads at 12s 6d a truck, but the following month work was suspended after 205 were crushed.¹⁵⁷ The last reported crushing was of eight trucks at

¹⁴⁶ *Te Aroha News*, 9 August 1884, p. 2.

¹⁴⁷ *Thames Star*, 16 August 1884, p. 4.

¹⁴⁸ *Te Aroha News*, 16 August 1884, p. 7.

¹⁴⁹ *Thames Star*, 28 August 1884, p. 2; *Te Aroha News*, 30 August 1884, p. 2; *Auckland Weekly News*, 30 August 1884, p. 20.

¹⁵⁰ See chapter on his life.

¹⁵¹ *Te Aroha News*, 28 February 1885, p. 7.

¹⁵² *Te Aroha News*, 1 May 1886, p. 2.

¹⁵³ *Thames Star*, Warden's Court, 22 August 1881, p. 2, 29 April 1886, p. 2.

¹⁵⁴ *Te Aroha News*, 20 September 1884, p. 2.

¹⁵⁵ *Te Aroha News*, 25 October 1884, p. 2, 27 December 1884, p. 2.

¹⁵⁶ *Waikato Times*, 7 February 1885, p. 3; *Thames Star*, 28 February 1885, p. 3; *Te Aroha News*, 21 March 1885, p. 2.

¹⁵⁷ *Te Aroha News*, 4 April 1885, p. 2, 23 May 1885, p. 2.

the start of June, for 2oz 5dwt retorted gold.¹⁵⁸ In all, 418 tons were crushed, yielding 174 ounces, an average of 8dwt 8gr per ton.¹⁵⁹ In November 1885, the upper hopper was removed for re-erection elsewhere;¹⁶⁰ in 1892, Henry Hopper Adams¹⁶¹ demolished the aerial tramway.¹⁶²

According to an 1897 account, the difficulty with treating the ore was not 'its refractory nature' but 'its extreme fineness. In all some 500 tons of quartz were crushed, which gave a return equal to about half an ounce to the ton', and it was estimated that because of the fineness 'not more than 35 per cent of the gold was saved'.¹⁶³

THE GREAT WESTERN COMPANY

There was a revival of interest in this area during the mining boom of the mid-1890s. In April 1896, the prominent local mine manager, Thomas Gavin,¹⁶⁴ was registered as the owner of the Great Western Special Claim, just under 100 acres, and did some prospecting.¹⁶⁵ Its area, later increased to approximately 200 acres, comprised the former Eureka, Little and Good, and Coquette claims.¹⁶⁶ The main reef, formerly the New Find No. 2 reef but now called the Great Western, had an average of nearly four feet of 'free milling ore, containing gold'.¹⁶⁷

Lacking capital, in September Gavin applied for six months' protection while he formed a company.¹⁶⁸ On his behalf, Henry Reynolds, sought English capital for him. Formerly Reynolds had a leading role in draining the Piako swamp, in farming in the Waikato, and in developing the export

¹⁵⁸ *Te Aroha News*, 6 June 1885, p. 2.

¹⁵⁹ *AJHR*, 1885, C-2, p. 30, 1887, C-5, p. 32.

¹⁶⁰ *Te Aroha News*, 21 November 1885, p. 2.

¹⁶¹ See paper on his life.

¹⁶² Te Aroha Warden's Court, Register of Applications 1883-1900, 22/1892, BBAV 11505/1a, ANZ-A.

¹⁶³ *New Zealand Herald*, 3 August 1897, p. 6.

¹⁶⁴ See paper on his life.

¹⁶⁵ Warden to Minister of Mines, 29 June 1897, *AJHR*, 1897, C-3, pp. 98, 99.

¹⁶⁶ *Ohinemuri Gazette*, 5 March 1898, Supplement, p. 1.

¹⁶⁷ *Ohinemuri Gazette*, 5 March 1898, Supplement, p. 1; James Coutts to Under-Secretary, Mines Department, 18 April 1898, *AJHR*, 1898, C-3A, p. 53.

¹⁶⁸ Te Aroha Warden's Court, Mining Applications 1896, 137/1896, BBAV 11582/4a, ANZ-A.

dairy industry.¹⁶⁹ He had invented a machine to cut manuka and another to sow seeds.¹⁷⁰ He had held 73 shares in one Waiorongomai mine in the early 1880s but had failed to pay calls.¹⁷¹ In the boom he was a commission agent, based for a time in London, with interests in about 20 Hauraki mines.¹⁷² In April 1897 he was described as a ‘mining expert’, and in September was elected a member of the Auckland Chamber of Mines.¹⁷³ At the end of April 1897 he inspected mines at Waiorongomai and Te Aroha,¹⁷⁴ twice inspecting some near the latter township and planning to float two in London.¹⁷⁵ In August what was described as the ‘Reynolds Syndicate’ took an option over the Great Western Special Claim.¹⁷⁶

Reynolds had returned to New Zealand from London in September 1896 with ‘very large capital at his back’ to buy mines ‘for a London syndicate’.¹⁷⁷ When in London he had floated the All Nations, at Stoney Creek.¹⁷⁸ No longer being directly involved in the butter trade, he decided ‘to go in largely for mining business’. Recognizing ‘the chief drawback’ was

¹⁶⁹ See *Observer*, 24 October 1903, p. 4; *A Return of the Freeholders of New Zealand ... 1882* (Wellington, 1884), p. R 17; *Cyclopedia of New Zealand*, vol. 2, pp. 757, 741; *Auckland Weekly News*, 19 July 1879, p. 13, 25 April 1891, p. 12, 5 September 1891, p. 12, 1 March 1901, p. 44; *New Zealand Herald*, 24 November 1887, p. 6, 23 September 1925, p. 12.

¹⁷⁰ *New Zealand Gazette*, 27 November 1884, p. 1638, 21 May 1885, p. 651, 24 September 1885, p. 1086; *Auckland Weekly News*, 11 July 1885, p. 25.

¹⁷¹ Advertisement, *Te Aroha News*, 20 December 1994, p. 7.

¹⁷² *New Zealand Gazette*, 20 November 1896, p. 1961; Coromandel Warden’s Court, Register of Licensed Holdings and Special Claims 1897-1898, folio 631, ZAAAN 14404/3a; Thames Warden’s Court, Register of Licensed Holdings and Special Claims 1897-1899, folio 1, BACL 14355/6a, ANZ-A; Thames School of Mines, Assay Book 1895-1897, entries for 6 May 1897, 13 May 1897, School of Mines Archives, Thames; *Auckland Weekly News*, 27 March 1897, p. 8.

¹⁷³ *Thames Advertiser*, 1 May 1897, p. 3; *Auckland Weekly News*, 18 September 1897, p. 20.

¹⁷⁴ *Waikato Argus*, 29 April 1897, p. 2; *Thames Advertiser*, 1 May 1897, p. 3.

¹⁷⁵ *Thames Advertiser*, 20 May 1897, p. 3.

¹⁷⁶ *Thames Advertiser*, 18 August 1897, p. 3, 2 March 1898, p. 2; *Waikato Argus*, 24 August 1897, p. 3.

¹⁷⁷ London Correspondent, *New Zealand Herald*, 1 September 1896, p. 5; *Auckland Star*, 12 September 1896, p. 5; *Auckland Weekly News*, 19 September 1896, p. 36.

¹⁷⁸ *Ohinemuri Gazette*, 3 June 1896, p. 2, 22 August 1896, p. 4; *Thames Advertiser*, 15 August 1896, p. 3.

‘the wholly unproved character of so many mining properties’, he planned ‘extensive testing and development of hitherto untested but promising properties, with the view to placing them on the market’ once their value had been ‘satisfactorily proved’. To that end, he had formed the Hauraki Development Syndicate in London with a capital of £25,000; at its inaugural meeting all shares were subscribed. As both its managing director and attorney in New Zealand, he was authorized to acquire the approximately 20 options he held in Hauraki and would return to England with ‘several proved mines for flotation in London by subsidiary companies’.¹⁷⁹

The syndicate’s general manager was Charles Ronald Farquharson, who had arrived in New Zealand in April 1897.¹⁸⁰ Top of the 1891 class at the Royal School of Mines in London, receiving a second-class associateship, he then had two and a half years’ practical experience as a miner and timberman at Broken Hill, New South Wales, before managing gold mines in Western Australia, where he erected a ten-head battery.¹⁸¹ In New Zealand, he described himself as a consulting engineer, was referred to by one newspaper as a ‘mining expert’, and was elected a member of the Auckland Chamber of Mines.¹⁸² He assisted the syndicate’s explorations at Coromandel,¹⁸³ supervised the Great Western Company’s mine and battery,¹⁸⁴ and participated in the Te Aroha community by playing for the tennis and cricket clubs.¹⁸⁵ The ‘popular’ mine manager was William Reid,¹⁸⁶ who had no recorded expertise as one. A builder, coachbuilder,

¹⁷⁹ *Auckland Weekly News*, 27 March 1897, p. 8, 3 April 1897, p. 38; *New Zealand Gazette*, 27 May 1897, p. 1116, 4 July 1898, p. 1143.

¹⁸⁰ Arrivals in Wellington, SS 1/465, p. 9 (Micro 5370), ANZ-W.

¹⁸¹ C.R. Farquharson to Board of Examiners, 30 January 1898, 8 May 1898, Mines Department, MD 1, 98/172, ANZ-W.

¹⁸² *Ohinemuri Gazette*, 22 May 1897, p. 4; *Auckland Weekly News*, 7 August 1897, p. 13, 2 October 1897, p. 30.

¹⁸³ Thames School of Mines, Assay Book 1895-1897, entries for 7 May 1897, 13 May 1897, School of Mines Archives, Thames.

¹⁸⁴ *Te Aroha News*, 27 January 1898, p. 2.

¹⁸⁵ *Te Aroha News*, 18 January 1898, p. 2, 25 January 1898, p. 2.

¹⁸⁶ *Thames Advertiser*, 29 July 1897, p. 3; *Auckland Weekly News*, 7 August 1897, p. 13.

general smith, and engineer,¹⁸⁷ two years previously he had acquired mines near Te Aroha township.¹⁸⁸

Late in April 1897, ‘a very nice reef’ containing gold was struck, and at the beginning of the following month prospects were reportedly ‘promising’. Dish tests of this ‘well-defined reef’ produced ‘tails of gold from quartz taken out at different points’.¹⁸⁹ Reid brought into Te Aroha ‘a fine specimen stone richly studded with gold’ obtained from a reef in the upper workings, creating hopes the mine would become ‘one of the leading bullion producers’.¹⁹⁰ In June a low level being driven to cut the main lode was in 60 feet, and in July was ‘progressing satisfactorily’.¹⁹¹ Either 13 or 14 men were at work, and ‘great expectations’ were held.¹⁹² An August report was optimistic:

The reef, which runs from 4 to 20 feet wide, outcrops along the side of the claim for 50 chains – the full length of the property – and is said to contain splendid free milling ore right along, what is known as the “black stone” being fairly rich in gold. The property is well situated, and the cost of conveying the quartz to the reduction works will be so small that it is estimated an average return of 12dwt will enable the company to pay dividends. As fairly good results were obtained in the past, and as the cyanide treatment is now available, the prospects are considered very promising.

The low level was in about 130 feet, a winze was ‘being sunk on the upper level alongside the old stopes to connect with the main low level’, and

¹⁸⁷ See Te Aroha Correspondent, *Auckland Weekly News*, 21 September 1895, p. 23; *Te Aroha News*, 12 October 1895, p. 2, 20 April 1909, p. 2, 12 September 1922, p. 1; *New Zealand Herald*, 18 September 1896, p. 6; Death Certificate of William Reid, 8 September 1922, 1922/5669, BDM.

¹⁸⁸ Te Aroha Warden’s Court, *Plaint Book 1880-1898*, 20, 21/1895, BBAV 11547/1a; *Mining Applications 1895*, 36, 59/1895, BBAV 11582/4a, ANZ-A; *Te Aroha News*, 10 April 1895, p. 2, 7 September 1895, p. 2, Warden’s Court, 28 September 1895, p. 2.

¹⁸⁹ *Thames Advertiser*, 28 April 1897, p. 3; Te Aroha Correspondent, *Thames Star*, 28 April 1897, p. 4; *Ohinemuri Gazette*, 5 May 1897, p. 2; Te Aroha Correspondent, *Waikato Argus*, 29 May 1897, p. 3.

¹⁹⁰ Te Aroha Correspondent, *Waikato Argus*, 3 June 1897, p. 2.

¹⁹¹ *Thames Advertiser*, 3 June 1897, p. 3, 10 July 1897, p. 3.

¹⁹² ‘Twinkler’, *Te Aroha Notes*, *Thames Star*, 15 July 1897, p. 4; *Thames Advertiser*, 24 July 1897, p. 3.

development was 'splendid'.¹⁹³ Late that month, the winze was 'abandoned on account of inability to cope with the inflow' of water, and the reef in the low level appeared to be splitting up.¹⁹⁴ 'Extensive work' was recorded in October.¹⁹⁵

Development was 'progressing very favourably' in January 1898,¹⁹⁶ and in the following month 12 men were employed. The low level had been driven 200 feet and the upper (or Eureka) level 300 feet, which would provide 230 feet of backs. In the low level the reef was six feet wide, in the Eureka it was four.¹⁹⁷ A visiting reporter was told the Great Western lode was expected to

average throughout nearly 4ft of free milling ore, containing fine gold. Considerable work was done upon it in the past from the surface down to the No. 1 level, 130ft. The present company have driven another level 75ft below No. 1 on the Great Western reef, a distance of 272ft, and have connected with No. 1 by a winze. The drive at No. 1 level is in about 340ft on the reef, and the intention is now to underhand stope the blocks of ground which have been left intact, and which it is believed can now be made to pay. Altogether a large amount of ore is in sight, quite sufficient to keep the small plant with a daily capacity of 10 tons at work for some time to come. The extension of No. 2 level is a work which should and I daresay will be pushed on with, as this will test the reef in virgin country.¹⁹⁸

THE GREAT WESTERN PLANT

As a result of Reynolds' visit in May 1897, 'a small experimental plant' was erected 'to treat some fairly good ore now being got out'.¹⁹⁹ According to the mining inspector, assays had been 'sufficient to warrant the outlay'

¹⁹³ *New Zealand Herald*, 3 August 1897, p. 6.

¹⁹⁴ *Thames Advertiser*, 28 August 1897, p. 3.

¹⁹⁵ *New Zealand Mines Record*, 16 October 1897, p. 103.

¹⁹⁶ *Te Aroha News*, 18 January 1898, p. 2.

¹⁹⁷ *New Zealand Mines Record*, 16 February 1898, p. 299.

¹⁹⁸ Special Reporter, *Auckland Star*, 17 March 1898, p. 7.

¹⁹⁹ 'Werahiko', 'Te Aroha Letter', *New Zealand Mining Standard and Financial News*, 6 May 1897, p. 4.

required to erect this plant close to the mine.²⁰⁰ To power it, Reid applied in May for a water race from Diamond Gully Creek, but this application was withdrawn.²⁰¹ His application for a machine site 'adjacent to the old New Find ore bins' beside the tramway was also withdrawn.²⁰² Reid then had an unspecified illness, and late in July could only take 'brief spells of walking exercise'.²⁰³ While he was recuperating, Farquharson applied for a machine site at the Diamond Gully end of this branch tramline.²⁰⁴ In August, he applied for a water race following the line from Premier Creek and detouring upstream at Canadian Gully to collect more water.²⁰⁵ The council granted permission but warned that the company would be liable if it damaged the tramway.²⁰⁶ The race, 60 chains long, was to take six heads of water from Premier Creek and four from Canadian Gully, but not constructed, an alternative source of water being found.²⁰⁷

Preparations started in July to erect an aerial tramway connecting the new low level with the battery.²⁰⁸ In November, nine men were working in the mine and 25 were doing outside work, cutting out the site for the battery, erecting hoppers, and preparing to build the aerial tramway.²⁰⁹ For £15, the syndicate purchased the galvanized steel rope wound onto a broken

²⁰⁰ James Coutts to Under-Secretary, Mines Department, 18 April 1898, *AJHR*, 1898, C-3A, p. 53.

²⁰¹ Te Aroha Warden's Court, Mining Applications 1897, 68/1897, BBAV 11582/4a, ANZ-A.

²⁰² Te Aroha Warden's Court, Mining Applications 1897, 69/1897, BBAV 11582/4a, ANZ-A.

²⁰³ *Thames Advertiser*, 29 July 1897, p. 3.

²⁰⁴ Te Aroha Warden's Court, Mining Applications 1897, 86/1897, BBAV 11582/4a, ANZ-A; F.A. Nutter, Plan of Battery Site for Great Western Special Claim, August 1897, Te Aroha Museum.

²⁰⁵ F.A. Nutter, Plan of Water Race for Great Western Special Claim, August 1897, Te Aroha Museum.

²⁰⁶ Piako County Council, *Waikato Argus*, 24 August 1897, p. 3; County Clerk to C.R. Farquharson, 25 August 1897, Piako County Council, Letterbook 1897-1899, p. 86, Matamata-Piako District Council Archives, Te Aroha.

²⁰⁷ Te Aroha Warden's Court, Register of Mining Privileges 1894-1910, folio 152, BBAV 11500/2a, ANZ-A; *Ohinemuri Gazette*, 5 March 1898, Supplement, p. 1.

²⁰⁸ *Thames Advertiser*, 10 July 1897, p. 3.

²⁰⁹ *New Zealand Mines Record*, 16 November 1897, p. 155.

drum just above the former New Era battery,²¹⁰ avoiding having to purchase the 18 chains of rope needed for its tramway.²¹¹

In mid-1897, rails were laid to bring machinery along the tramline from the May Queen incline.²¹² Reid supervised the excavation for the battery,²¹³ and a 'well known' consulting engineer, H. Griffiths,²¹⁴ erected a Chilian mill.²¹⁵ The plant, erected under Farquharson's supervision,²¹⁶ could crush 60 tons, the same amount as a ten-head stamper in a six-day week.²¹⁷ A visiting reporter gave a detailed account of the plant in March 1898:

The mill is a compact little plant erected on an excavation made out of the solid face of the hill, a work of considerable magnitude, no other spot being available. The system of treatment will be by dry crushing and leaching with cyanide. The mill was started the day of my visit, and barring a few hitches incidental to all new plants, worked satisfactorily. The ore is conveyed from hoppers at No. 2 or low level by an aerial tram 16 chains long to a hopper leading into the rock-breaker placed on a level with the top of the ore-drying kiln above the mill. Passing through, it falls by a shoot into the kiln, where it is dried. A short drive leads from the battery into the bottom of the kiln, which is provided with a pass door. The dried ore is then trucked out and fed into the mill – a Wood and Clark's patent Deadweight dry crusher of an estimated capacity of 10 tons per day. The crushed ore is then elevated by the suction of an air fan through a series of enclosed inclined planes into the dust hoppers. The heavier particles of course fall back into the mill and are re-pulverised. There are three dust bins which receive the ground ore in three degrees of fineness respectively. The plant is fitted with six percolation vats, holding 10-ton charges, besides the necessary mixing tanks, sumps, zinc boxes, etc. Water for the mill is supplied from an old drive 100ft

²¹⁰ See paper on Peter Ferguson and his New Era.

²¹¹ C.R. Farquharson to George Wilson, 24 June 1897; Peter Ferguson to Henry Reynolds, 11 November 1897, Mines Department, MD 1, 00/1182, ANZ-W.

²¹² *Thames Advertiser*, 3 June 1897, p. 3, 10 July 1897, p. 3.

²¹³ *Thames Advertiser*, 28 August 1897, p. 3.

²¹⁴ Neither his first name nor his life have been traced.

²¹⁵ *Thames Advertiser*, 9 August 1897, p. 2.

²¹⁶ C.R. Farquharson to Board of Examiners, 30 January 1898, Mines Department, MD 1, 98/172, ANZ-W; see also John Watson to C.R. Farquharson, 17 January 1898, Letterbook 1898, p. 608, A. & G. Price Archives, Thames.

²¹⁷ *Te Aroha News*, 5 February 1898, p. 2, 12 February 1898, p. 2.

above the works, being led down by a 4in pipe giving 90ft of fall. The whole plant, including the rock-breaker, is driven by a 9 1/2 horse-power Hornsby-Ackroyd oil engine. This is really the auxiliary power, as in winter a Pelton wheel will provide the motive power. A feature in connection with this plant is that the Pelton is placed 140ft below the mill, in order to secure a great fall, and thus make the most of the water. The power will then be transmitted to the main shaft in the mill by a steel wire rope. This scheme will be something new in this part of the country, and is expected to answer the purpose well.

With the present description of the ore the system of treating with cyanide should prove successful, as the gold is undoubtedly very fine, and the stone contains scarcely any mineral at all. The only difficulty will be in overcoming the slimes difficulty in percolating, as the patent mill has a decided tendency to crush fine, by reason of the present inability of the air fan to remove other than the very fine particles. This defect may of course be remedied.²¹⁸

Another account reported four kilns, '6ft in diameter and 20ft deep, constructed on a similar principle to the kilns at the Waihi Mine'. The dry-crushing Chilian mill would reduce the ore to a half-inch 'mesh. It will then pass on to the air-blast classifier, the "roughs" being sent back to the mill and the "fines" retained in the hoppers. There are six small cyanide-vats, about 10ft in diameter each'.²¹⁹

By the beginning of February, the Chilian mill was sufficiently completed that the machinery could be started; it 'worked very satisfactorily'. Low water pressure meant a petrol engine was used, but as this did not provide sufficient horsepower work had to be suspended.²²⁰ Farquharson was confident that he could remedy this lack of motive power.²²¹ The *Te Aroha News* understood his alterations produced 'satisfactory results'. Using a better class of oil, the Otto Gasoline engine was now adequate, and the Chilian mill was 'doing excellent work'. The one 'objectionable feature' was the dust, which would be overcome 'by boxing in the mill table, leaving only a small aperture through which the machine may be fed'. Farquharson also planned to add 'an automatic feeder combined with a drier – the work to be done by a revolving cylinder,

²¹⁸ Special Reporter, *Auckland Star*, 17 March 1898, p. 7.

²¹⁹ *New Zealand Mines Record*, 16 February 1898, p. 299.

²²⁰ *Te Aroha News*, 5 February 1898, p. 2.

²²¹ *Te Aroha News*, 10 February 1898, p. 2.

designed on the principles of an Archimedian screw. The stone, reduced to uniform size by a rock-breaker, by a novel arrangement, will be dried in its passage through the cylinder'.²²²

Griffiths inspected the machinery after it started operating,²²³ and offered to produce a report. James Russell, an Auckland lawyer closely associated with mining,²²⁴ who was acting as attorney for the syndicate while Reynolds was in England, told Farquharson in early March that he did 'not think much good would be done by getting it. It would only confirm your view respecting the mill. So unless you press the matter I will not speak to him about it'. He considered 'a cable should be sent at once informing London of the state of the mill'.²²⁵ Clearly it was unsatisfactory.

At the beginning of April, crushing was suspended because the 'rollers of the dry crushing mill have completely worn through the bottom of the pan'.²²⁶ The result of tcrushing 'about' 100 tons was not released, but the fact that 'the grinding was very severe on the bottom of the mill' was made public.²²⁷ Negotiations were underway to lease the Waiorongomai battery, for Farquharson was 'anxious to complete his trial parcel of 500 tons' and the English directors were 'anxious to put through a large parcel' to discover the ore's value.²²⁸ It was rumoured that the syndicate would erect a battery below their existing one, on the Loyalty-Palace machine site.²²⁹ Publicly it was claimed the experimental crushings justified it 'taking the important step of leasing' the Waiorongomai battery, or at least using ten of its stamps.²³⁰

MINING ENDS

²²² *Te Aroha News*, 12 February 1898, p. 2.

²²³ *Te Aroha News*, 10 February 1898, p. 2.

²²⁴ See *New Zealand Herald*, 20 February 1905, p. 4; *Observer*, 25 February 1905, p. 4.

²²⁵ James Russell to C.R. Farquharson, 10 March 1898, Jackson and Russell Letterbook no. 69 (March-July 1898), p. 36, MS 360, Library of the Auckland Institute and Museum.

²²⁶ *Thames Advertiser*, 8 April 1898, p. 4.

²²⁷ *New Zealand Herald*, 13 May 1898, Supplement, p. 1.

²²⁸ *Thames Advertiser*, 8 April 1898, p. 4; *New Zealand Herald*, 13 May 1898, Supplement, p. 1.

²²⁹ *Te Aroha News*, 7 April 1898, p. 2.

²³⁰ *Te Aroha News*, 28 April 1898, p. 2; *New Zealand Herald*, 13 May 1898, Supplement, p. 1.

In late April, Farquharson informed Russell that the return from the 115 tons crushed was approximately £25.²³¹ From this tonnage 10oz 17dwt of bullion, not gold, had been produced.²³² Russell informed Gavin of this 'most disappointing return' and wondered whether to advise the syndicate to continue with the option or to throw it up. The agreement with Gavin provided for an extension of the option until 1 August on condition that £150 was paid, which Russell considered too high. He was willing to advise payment of £50 for every month before 1 May, to be treated as payment towards the purchase.

I hope that you and the gentlemen connected with you in this matter will view the present position of the Syndicate with some consideration for the large sums of money they have already expended without much prospect of getting it back and meet them in accepting this offer which personally I think is a fair one under the very adverse circumstances in which they are placed.²³³

Gavin's reply has not survived, but in May he applied to work with four men for four months 'pending arrangements for crushing'. This application was withdrawn after he applied for six months' protection because 'present machinery unsuitable – new machinery required'. Four months were granted.²³⁴ In late June, because the local quartz was 'somewhat of a flinty nature', the Chilian mill could not treat it and 50 tons would be treated at the Waiorongomai battery.²³⁵ If this trial crushing took place it cannot have been profitable, for the mine was soon abandoned.

When Reynolds returned from London in June, he revisited Waiorongomai and ordered further mine development.²³⁶ But at the end of that month Farquharson applied for protection of its machine site 'to give time for disposal of machinery'.²³⁷ The syndicate's refusal to pay £17 10s

²³¹ James Russell to Thomas Gavin, 22 April 1898, Jackson and Russell Letterbook no. 69 (March-July 1898), p. 349, MS 360, Library of the Auckland Institute and Museum.

²³² *New Zealand Mines Record*, 16 August 1898, p. 37.

²³³ James Russell to Thomas Gavin, 22 April 1898, Jackson and Russell Letterbook no. 69 (March-July 1898), p. 349, MS 360, Library of the Auckland Institute and Museum.

²³⁴ Te Aroha Warden's Court, Mining Applications 1898, 29, 31/1898, BBAV 11582/4a, ANZ-A.

²³⁵ *Te Aroha News*, 23 June 1898, p. 2.

²³⁶ *Thames Advertiser*, 13 June 1898, p. 4.

²³⁷ Te Aroha Warden's Court, Mining Applications 1898, 32/1898, BBAV, 11582/4a, ANZ-A.

towards repairing the tramline meant the council refused to allow Farquharson or any purchaser of the machinery to transport it down.²³⁸ By October, Farquharson had left the district, abandoning his residence site.²³⁹ From September to November 1899, Reid removed the machinery and re-erected it elsewhere.²⁴⁰

CONCLUSION

This case study reveals not merely the waste of financial and human resources in a fruitless attempt to develop a payable mine, but also how lack of geological knowledge meant experienced miners could be misled about the value of their ore. They were not alone; all the miners and mining reporters who inspected their ground unanimously stated that it would bring lasting prosperity. Even English 'experts' with English capital could do nothing with a mine with low grade ore. This inability to estimate the value of the quartz being exposed in the drives or to be able to predict what was yet to be opened up was to be repeated time and time again on this and other goldfields until more recent times, when companies with more capital, scientific knowledge, and technical resources could thoroughly test the ground before expending money on mines doomed to be unprofitable.

²³⁸ County Clerk to C.R. Farquharson, 5 April 1898, 1 August 1898, 26 November 1898, 24 January 1899, Piako County Council, Letterbook 1897-1899, pp. 251, 316, 382, 410, Matamata-Piako District Council Archives, Te Aroha.

²³⁹ Te Aroha Warden's Court, Register of Mining Privileges 1893-1910, folio 139, BBAV 11500/2a, ANZ-A.

²⁴⁰ *Thames Advertiser*, 4 September 1899, p. 3; Piako County Council, Letterbook 1899-1901, pp. 72, 97, Matamata-Piako District Council Archives, Te Aroha.