

THE WAITOKI, WAITOKI EXTENDED, WERAHIKO, SUCCESS,
SILVER KING, CADMAN AND BENDIGO MINES AT
WAIORONGOMAI

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Te Aroha Mining District Working Papers

No. 94

2016

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ISSN: 2463-6266

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THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

THE WAITOKI, WAITOKI EXTENDED, WERAHIKO, SUCCESS, SILVER KING, CADMAN AND BENDIGO MINES AT WAIORONGOMAI

Abstract: *The Werahiko and Waitoki mines were the first to work this ground, with great expectations. During 1882 and 1883 there were periodic encouraging reports of the value of the ore, but expectations were dashed when the first crushing proved it was unpayable. Nevertheless, some mining continued on part of the ground, which was worked under several different names. Optimism that better gold would be struck was indicated by a warden's court suit seeking its forfeiture for non-working.*

Some owners acquired the ground in the hope of selling it to overseas investors, but apart from the Te Aroha Silver and Gold Mining Company acquiring it in 1888 (and soon abandoning it) these hopes were in vain. Small-scale development continued into the twentieth century, but the erratic ore and the inadequate treatment methods available meant that little benefit resulted from such off-and-on mining. The Bendigo battery was erected to treat the ore, but quickly closed in 1912. During the Depression more prospecting took place, but mining ended for good in 1936.

THE LOCATION OF THE FIRST CLAIMS

The original Werahiko ground was divided into three sections: No. 1 containing 15 men's ground, No. 2 containing 14, and No. 3 one less again. Adjoining on the lower side was the Waitoki, of 15 men's ground; on its southern side was the Waitoki Extended, of 13 men's ground.¹

Henry Ernest Whitaker, an agent,² applied for the Werahiko claims on 25 November 1881.³ When granted as licensed holdings on 25 January 1882, the owners were their discoverer, Hone Werahiko,⁴ Whitaker, and

¹ Te Aroha Warden's Court, Register of Te Aroha Claims 1880-1888, folios 235-237, BBAV 11567/1a; Licensed Holdings Grant Book 1880-1882, no pagination, BBAV 11549/1a, ANZ-A; H.G. Graeme, Map of Waiorongomai Goldfield (1884).

² See paper on Harry and Charles: Henry Ernest Whitaker and Charles Stanislaus Stafford.

³ Te Aroha Warden's Court, Register of Applications 1880-1882, folio 113, BBAV 11505/3a, ANZ-A.

⁴ See paper on his life.

John Abbott,⁵ a moneylender with many investments in the field.⁶ In mid-April 1882, Whitaker's partner, Charles Stanislaus Stafford,⁷ applied for the Waitoki, which was granted to him in early June.⁸ One month later, the Waitoki Extended was granted, to another sole owner, William Wilson,⁹ a draper and storekeeper at Te Aroha and Waiorongomai.¹⁰ As treasurer of the syndicate working it, he arranged for its registration. In October, Thomas Scott, a local mine manager,¹¹ sued to obtain either his share or its value, which he estimated as £100. One week later, he withdrew his plaint;¹² clearly the dispute had been settled out of court.

In April 1882, the Waitoki Company was registered, with a nominal capital of £20,000 in £1 shares; 18,500 had been subscribed before registration, mostly by the Battery Company.¹³ In June, the Werahiko Company was registered. Of its nominal capital of £30,000, in £1 shares,

⁵ Te Aroha Warden's Court, Register of Te Aroha Claims 1880-1888, folios 235-237, BBAV 11567/1a, ANZ-A.

⁶ See *Observer*, 5 August 1882, 23 December 1893, p. 7, 15 October 1898, p. 2, 19 January 1901, p. 9; *Cyclopedia of New Zealand*, vol. 2, p. 423; for his investments in Waiorongomai, see Te Aroha Warden's Court, Register of Te Aroha Claims 1880-1888, folios 233-237, BBAV 11567/1a; Register of Licensed Holdings 1881-1887, folios 3, 5, 8, 10, 12, 16, 19, 21, 26, 27, 31, 55, 64, BBAV 11500/9a, ANZ-A; *New Zealand Gazette*, 23 March 1882, p. 490, 18 May 1882, p. 728, 22 June 1882, p. 895, 14 December 1882, p. 1885.

⁷ See paper on Harry and Charles: Henry Ernest Whitaker and Charles Stanislaus Stafford.

⁸ Te Aroha Warden's Court, Register of Applications 1880-1882, folio 123, BBAV 11505/3a; Licensed Holdings Grant Book 1882-1886, folio 30, BBAV 11549/1b, ANZ-A.

⁹ Te Aroha Warden's Court, Register of Applications 1880-1882, folio 128, BBAV 11505/3a; Licensed Holdings Grant Book 1882-1886, folio 5, BBAV 11549/1b, ANZ-A.

¹⁰ See Te Aroha Correspondent, *Waikato Times*, 19 November 1881, p. 2; *Thames Advertiser*, 30 November 1880, p. 3, 19 April 1882, p. 3; *Thames Star*, 3 July 1882, p. 2; advertisement, *Te Aroha News*, 21 July 1883, p. 3.

¹¹ See *Thames Star*, 16 August 1882, p. 2; *Thames Advertiser*, 3 May 1883, p. 2, 17 October 1885, p. 3; *Te Aroha News*, 10 October 1885, p. 2, 1 October 1887, p. 2.

¹² Te Aroha Warden's Court, Mining Applications 1882, 93/1882, Thomas Scott v. William Wilson, 24 October 1882, BBAV 11572/1a; Plaint Book 1880-1898, 93/1882, BBAV 11547/1a, ANZ-A.

¹³ *New Zealand Gazette*, 27 April 1882, pp. 646-647.

27,940 were subscribed and 266 held in trust.¹⁴ Not till November was the Waitoki Extended Company registered, with a nominal capital of £17,000, 13,000 of which had been subscribed.¹⁵

DEVELOPING THE WERAHIKO, WAITOKI, AND WAITOKI EXTENDED MINES DURING 1882

The first mine manager of the Werahiko was Edward Cameron.¹⁶ By the beginning of April he had struck a new reef, five feet wide, and had broken out ten pounds of ‘very nice specimen stone’.¹⁷ Traced for 200 feet, samples from this lode were displayed in Whitaker’s office window.¹⁸ This discovery, believed to be ‘of very considerable importance’, had been found in No. 2, the central claim. As the quartz was ‘impregnated’ with gold and the reef had been traced on the surface for over 150 feet, adjacent ground was taken up.¹⁹ This discovery was ‘a great source of attention’, and all who visiting were ‘unanimous in pronouncing the show so far, one of the best seen in the whole district. In the looser portions of the reef splendid dish prospects can be had by washing; and occasionally stone, rich in the precious metal, can be obtained’. Another ‘small parcel of a few pounds of very excellent quartz’ was on display, ‘the stone showing the gold to be well distributed’.²⁰ Its value was estimated to be one ounce to the ton.²¹ By the end of the month, the lode was being traced to the Waitoki boundary.²² By early May, a crosscut in No. 2 when driven 26 feet had cut a reef ‘fully as rich, if not superior to that showing gold in the cap of the lode on the surface’; a sample had gold ‘thickly distributed’. Cameron was driving south on it.²³ By early June, he had driven 20 feet, and gold was ‘seen at every

¹⁴ *New Zealand Gazette*, 22 June 1882, p. 895.

¹⁵ *New Zealand Gazette*, 14 December 1882, p. 1885.

¹⁶ See paper on his life.

¹⁷ *Thames Star*, 3 April 1882, p. 2.

¹⁸ *Thames Advertiser*, 5 April 1882, p. 3.

¹⁹ Te Aroha Correspondent, *Waikato Times*, 6 April 1882, p. 2.

²⁰ Te Aroha Correspondent, *Waikato Times*, 11 April 1882, p. 2.

²¹ J.M. McLaren (Inspector of Mines) to Under-Secretary, Gold Fields, 12 May 1882, *AJHR*, 1882, H-19, p. 16.

²² *Thames Advertiser*, 29 April 1882, p. 3.

²³ Te Aroha Correspondent, *Waikato Times*, 6 May 1882, p. 2.

breaking down' of this three-foot wide reef.²⁴ 'The country is everything that could be desired'.²⁵ At the beginning of July, he was 'taking out quartz which will go 3oz to the ton at the lowest calculation. The reef averages from 3 to 4 feet thick. It has been driven on about 50 feet, and shows gold freely the whole distance, the best of the gold being found on the floor of the drive'.²⁶

By late May, work had commenced in the Waitoki.²⁷ After two weeks' work, the crosscut was predicted to hit the reef in another 30 feet. As this reef was gold bearing on the surface, a journalist expected to see gold as soon as it was cut.²⁸ At the beginning of July, this crosscut continued towards the Werahiko reef, which, it was now known, ran through the Waitoki. As a leader one-foot thick had been cut in which gold was 'plainly seen', it was planned to drive along it to where it joined the main reef. 'The manager intends recommending the directors and his company to put in a low level tunnel, from which both companies can be worked with great advantage'.²⁹ Late in September, 'some good stone' had been broken out of the Waitoki, 'and the prospects greatly improve as the reef is driven upon'.³⁰

In October, a mining reporter described the ground:

The Werahiko Company own a lease of five acres, and in a prospecting drive started about the centre of the claim, two reefs, 3 feet wide respectively, have recently been cut, both gold-bearing. Of 80 tons of quartz stacked, one lot of 40 tons, according to prospects obtained by hand crushing, should give a return of 3oz, and the remainder 10dwt to the ton. The country here is easy to work. North-east, and adjoining the Werahiko, the Waitoki Company's claim shows two distinct north and south reefs out-cropping throughout the ground. Four men working night and day are driving to catch these, and have cut, on the floor of the drive, a third reef 15 inches wide, carrying gold. The drive is now in 50 feet, and the manager expects to tap the main reefs 150 feet further in. When carried through, this drive will give 100 feet of backs. In this claim, there is a second drive at a higher level, showing a reef five feet wide, which has been followed 45 feet on

²⁴ *Waikato Times*, 8 June 1882, p. 3.

²⁵ *Te Aroha Mail*, 10 June 1882, p. 3.

²⁶ *Te Aroha Mail*, n.d., reprinted in *Thames Advertiser*, 3 July 1882, p. 2.

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

²⁸ *Te Aroha Mail*, 10 June 1882, p. 3.

²⁹ *Te Aroha Mail*, n.d., reprinted in *Thames Star*, 3 July 1882, p. 2.

³⁰ *Te Aroha Mail*, n.d., reprinted in *Thames Star*, 25 September 1882, p. 3.

its course with payable prospects. Within three months, and with only three men employed, the energetic manager of this mine, Mr Cameron, has made considerable progress.³¹

At the end of this month, 'the contractors having jibbed', clearly because they were losing money, tenders were 'called for continuing the low level' which the Werahiko and Waitoki companies were 'constructing jointly'.³² The most important discovery in that week was 'some splendid stone showing rich gold, has been obtained in veins running through the large reef'. The lode was 'very upright, and in good country'.³³ A miner who had 'been working in this claim for some time' had 'struck the gold after driving around 15 feet. The reef was about 18 inches thick, with gold shewing through the stone', greatly increasing share values.³⁴ 'Good stone' was displayed in a Waiorongomai store.³⁵ No reports were published on these mines for the remainder of the year.

1883

In early 1883, the Werahiko and Waitoki companies, having driven the low level crosscut to prove the reefs at greater depth, sank a shaft from the intermediate level to enable both mines to send quartz to the low level.³⁶ In February, good gold was found in the Werahiko's No. 2 level.³⁷ Late in the following month, the winze between the surface level and the intermediate one holed through.³⁸ Good progress was reported in sinking another to the low level, and it was estimated that this mine would keep ten heads of stampers at work 'for a considerable time from the quartz now in sight'.³⁹ The warden reported in mid-April that it had been proved that rich quartz extended from the surface to the intermediate level of the Werahiko. 'When the connection is made with the horse-grade', meaning the extension of the

³¹ A.L. 'The Te Aroha Goldfield', *Auckland Weekly News*, 28 October 1882, p. 20.

³² *Thames Advertiser*, 30 October 1882, p. 3.

³³ *Te Aroha Mail*, n.d., reprinted in *Thames Star*, 31 October 1882, p. 2.

³⁴ Te Aroha Correspondent, *Waikato Times*, 28 October 1882, p. 2.

³⁵ *Thames Advertiser*, 30 October 1882, p. 3.

³⁶ Harry Kenrick to Under-Secretary, Gold Fields, 19 April 1883, *AJHR*, 1883, H-5, p. 16.

³⁷ *Thames Star*, 20 February 1883, p. 2.

³⁸ *Waikato Times*, 20 March 1883, p. 3, 27 March 1883, p. 2.

³⁹ Te Aroha Correspondent, *Waikato Times*, 27 March 1883, p. 2.

tramway from the top of Butler's Incline, 'they will be in a position to stope a large block on their reef. The Waitoki have also a good run of gold in the reef at the intermediate level'.⁴⁰

During May the winze connecting the low level with the upper workings would 'be completed as soon as timber can be sawn to line the partition'.⁴¹ A hopper would be constructed beside the tramway.⁴² By mid-July, as the shared hopper and chute were almost completed all the ore in the paddock would soon be sent to the hopper.⁴³ The chute, 101 feet long, ended at an iron door, where a double chute sent ore to either company's hopper. The combined hopper, 24 feet long and 12 feet deep, with rear walls four feet higher than the front ones, could hold over 100 tons. By then, the paddock at the mouth of the low level held almost 100 tons.⁴⁴ Both hopper and chute were completed before the end of the month.⁴⁵

At the beginning of August, plans were announced to rise from the top levels of both mines to the surface. 'Our Waitekauri miners fancy the class of country and quartz here more than any other in this district. That brown, soft, kindly looking rock, full of purple streaks, seems to remind them of palmy days'.⁴⁶ Reputedly similar quartz had been found in Kuranui Hill in the early days of the Thames goldfield.⁴⁷ At the end of September, Cameron expected the Werahiko and Waitoki ore to be the best on the field.⁴⁸ He was 'stowing the quartz coming to hand from the stopes in the hopper, paddock and every available corner. Some grand quartz is now in the hopper', and he expected the first crushing to prove the gold was first in quality 'and in quantity little if any behind'.⁴⁹ When stoping out the quartz, he could 'see gold every breaking down' that 'closely resembles that found in the rich patches at Waitekauri'. By mid-October, the hopper was full and about 200 tons was held in the paddock and drives.⁵⁰ During that month, the one man

⁴⁰ Harry Kenrick to Under-Secretary, Gold Fields, 19 April 1883, *AJHR*, 1883, H-5, p. 16.

⁴¹ *Waikato Times*, 1 May 1883, p. 2; *Thames Advertiser*, 3 May 1883, p. 2.

⁴² *Thames Advertiser*, 3 May 1883, p. 2.

⁴³ *Thames Star*, 13 July 1883, p. 3.

⁴⁴ *Thames Advertiser*, 17 July 1883, p. 2.

⁴⁵ *Te Aroha News*, 28 July 1883, p. 3.

⁴⁶ *Te Aroha News*, 4 August 1883, p. 2.

⁴⁷ *Te Aroha News*, 6 October 1883, p. 3.

⁴⁸ *Te Aroha News*, 29 September 1883, p. 3.

⁴⁹ *Waikato Times*, 4 October 1883, p. 2.

⁵⁰ *Auckland Weekly News*, 20 October 1883, p. 9; *Te Aroha News*, 20 October 1883, p. 2.

mining in the Waitoki Extended was trucking ore ‘on the north end of the claim. It is rather bad there for surface work, on account of so much surface soil, but he has cut a very nice looking reef about two feet thick’.⁵¹

The first crushing was expected to prove Werahiko ore to be the richest.⁵² From 174 tramway truckloads treated 1,453 3/4oz of amalgam were obtained, containing either 252oz or 260oz 10dwt gold.⁵³ The melted gold produced a surprisingly low assay value of £2 8s 9d.⁵⁴ ‘Astonishment’ was expressed because tests had been so encouraging, although the ore ‘was known to contain an unusual percentage of base metal – either silver or lead’,⁵⁵ the uncertainty indicating that the miners could not detect silver.⁵⁶

Before the crushing, the local newspaper considered that, although Waitoki ore was not as rich as Werahiko, ‘as the reef is large and the country easy, lower grade quartz will pay, and steady payable returns may be expected’.⁵⁷ In the first month 82 truckloads produced 217 1/4oz of amalgam containing 36oz of gold.⁵⁸ The assay value of the melted gold was £2 8s 6d an ounce, fractionally less than in the Werahiko. A Waiorongomai correspondent reported ‘some surprise’ being felt ‘at the low prices obtained’.⁵⁹

In mid-December, a mining reporter commented on the mines:

WERAHIKO. – In this claim, although most of the stone lately crushed yielded pretty highly, yet the claim has not come up to expectations. The stone from the lower level is nothing like so good as that from the upper workings. The company has confined its workings to a small portion of the ground, and the greater part of it is just about as well-known as on the day it was pegged out. The manager was not in a position to do much work, having so few men at his disposal. There can be little doubt that a large amount of quartz of a payable nature will be found, but it will take some time and a little work to develop.

⁵¹ *Auckland Weekly News*, 20 October 1883, p. 9.

⁵² *Thames Star*, 6 November 1883, p. 2.

⁵³ *Thames Advertiser*, 7 December 1883, p. 3; *Thames Star*, 7 December 1883, p. 2.

⁵⁴ *Thames Star*, 8 December 1883, p. 2; *Te Aroha News*, 15 December 1883, p. 2.

⁵⁵ *Thames Advertiser*, 10 December 1883, p. 2.

⁵⁶ See paper on prospectors’ and miners’ skills.

⁵⁷ *Te Aroha News*, 3 November 1883, p. 2.

⁵⁸ *Thames Star*, 6 November 1883, p. 2, 7 December 1883, p. 2.

⁵⁹ Waiorongomai Correspondent, *Thames Star*, 8 December 1883, p. 2.

WAITOKI. – The crushing must be considered a disappointment, and shows how easily men may be deceived by small tests. This mine was never considered one of the crack ones, but it was generally expected it would pay expenses; in this the shareholders have been disappointed up to the present, but a large amount of ground remains to be prospected, and there is no reason for the owners of scrip to despond, as they have a mine that is well worth prospecting.⁶⁰

Another reporter provided a more detailed report on all these mines except the Little Wonder, which would not live up to its name:

LITTLE WONDER AND WAITOKI EXTENDED

These two pieces of ground are situated about on a level with Butler's Spur. Some time ago a reef, showing gold, was found in the Extended ground, but it being below the level at which communication with the tramway was practicable, it was abandoned at that place, and a crosscut commenced on the boundary of the two claims mentioned, to intersect the reef at a point on the side of the spur nearest the tramway, from which a branch line could easily be constructed. It is not known where the reef will cross the spur, but the men in the drive expect to get it soon, and as the crosscut is in good country they are sanguine of the prospects of obtaining gold.

WAITOKI

This claim adjoins the Waitoki Extended on the south, and is the first one met with, in going up the track, which has sent quartz to the mill. A branch line from the top of Butler's spur leads to a double hopper, into which quartz from the Waitoki and Werahiko is run from a long shoot. At the top of this is a crosscut driven, and a pass from it to a level 100ft above, the latter being the Waitoki main level and the Werahiko intermediate level. Here the reef has been driven on some distance from the Werahiko boundary, and from here the recent crushing was taken out, which unfortunately did not yield well. Some good gold was found in the reef on the surface, but owing to the block not having been properly opened up, it was not ready for taking out when crushing was started, and in consequence it has not yet been stoped. Work in this section has now been suspended, and the hands are employed prospecting a reef lower down the hill.

WERAHIKO

This claim adjoins the Waitoki northern boundary, and consists of three leases, in the centre one of which the reef was first discovered, gold being freely seen. A surface level was entered on the lode, and driven through the top of the spur, the reef striking

⁶⁰ 'Te Aroha Mines [Specially Reported]', *Thames Advertiser*, 11 December 1883, p. 2.

N.E. and S.W., and dipping to the west. Excellent gold was seen and the precious metal was freely visible in the floor. The block above was stoped to the surface, an intermediate level entered 40 feet below, and a winze sunk to it. The manager also carried an underhand stope along the floor of the surface level. It was from the surface block, winze, and underhand stope that the crushing last month was obtained. At the intermediate level the reef did not show as much gold as on the surface, but prospected well when pounded up. In the southern drive the reef is fully four feet wide. A leading stope is being carried along this drive at present, and the dirt from here has been going through the mill for the past few days, but, as might have been expected, is not shaping so well as [the] last parcel. The reef has also been cut in the low level at the top of the shoot, 100ft below the intermediate; it is there a fine body of stone, though no gold was seen in it. It is rather disappointing to find that the reef does not appear to improve as it descends, but as so little has been done on it in the way of driving it is quite possible that the shot of gold has not yet been reached. The country throughout is of an excellent class for the existence of payable reefs, being a good white sandstone. Besides the lode mentioned, there is another reef striking off westward from it, which showed gold on the surface, and on which no work has yet been done below. There is plenty of room for prospecting in this mine, the workings being in the centre of the middle lease of the three.⁶¹

Shortly after this report was published, 'all hands' in the Waitoki were 'knocked off' with the exception of two men who are prospecting the big reef.⁶² Work continued in the Waitoki Extended, where the prospecting drive, in 100 feet, was expected to cut the reef shortly.⁶³

Werahiko quartz treated in December, reportedly of much better quality, was estimated to yield about one ounce to the ton.⁶⁴ This better ore came from the southern end of the drive on the lode in the surface level.⁶⁵ Before the battery closed on 22 December, 224 trucks of Werahiko ore had produced 292oz 3dwt gold, and 82 trucks of Waitoki ore had returned 43oz 13dwt gold.⁶⁶ The mining inspector later reported 36oz were obtained from

⁶¹ Special Reporter, 'A Trip to Te Aroha Goldfield', *Thames Star*, 13 December 1883, p. 2.

⁶² *Waikato Times*, 18 December 1883, p. 2.

⁶³ *Te Aroha News*, 15 December 1883, p. 2.

⁶⁴ *Waikato Times*, 18 December 1883, p. 2.

⁶⁵ *Te Aroha News*, 15 December 1883, p. 2.

⁶⁶ *Te Aroha News*, 5 January 1884, p. 2.

123 tons of Waitoki ore.⁶⁷ Shareholders were told that 109 tons were worth £81 12s 1d, which was unpayable.⁶⁸ Whatever the exact figures, an average of either 5dwt or 5dwt 21gr per ton was not payable.⁶⁹

1884-1885

In mid-February 1884, the block above the intermediate level in the Werahiko was being worked, 'but owing to the broken nature of the country, which necessitates the filling in of the stopes almost as quickly as the quartz is taken out, it is not possible to make very rapid progress'. By then, 30 tons were stockpiled.⁷⁰ By early April, this mine, described by the mining inspector as being 'well opened up', had produced 397oz 8dwt from 326 tons.⁷¹ In mid-April, 58oz were extracted from about 140 tons, but the mine had 'not proved payable'.⁷² The following month, the inspecting engineer for the Mines Department reported that since the December crushing the Werahiko had 'not turned out so well as was at first anticipated'.⁷³ In October, it was let on tribute for 12 months.⁷⁴ In December the Werahiko No. 3 was forfeited for non-working, as was No. 1 in March 1885,⁷⁵ when work resumed in No. 2. 'The staff consists of one man and a boy, who are going to work on a leader in order to get another trial crushing'.⁷⁶ By April, 21 trucks had produced 5oz 10dwt retorted gold.⁷⁷ Two months later, 16 trucks produced an identical return.⁷⁸ Work then ceased, for although 307oz

⁶⁷ George Wilson to Harry Kenrick, 9 April 1884, *AJHR*, 1884, H-9, p. 21.

⁶⁸ *Thames Advertiser*, 1 May 1884, p. 2.

⁶⁹ H.A. Gordon to Under-Secretary, Mines Department, 20 May 1884, *AJHR*, 1884, H-9, p. 1; H.A. Gordon to Minister of Mines, 5 May 1887, *AJHR*, 1887, C-5, p. 32.

⁷⁰ *Te Aroha News*, 16 February 1884, p. 2.

⁷¹ George Wilson to Harry Kenrick, 8 April 1884, *AJHR*, 1884, H-9, p. 21.

⁷² *Te Aroha News*, 19 April 1884, p. 2; Harry Kenrick to Under-Secretary, Gold Fields, 19 April 1884, *AJHR*, 1884, H-9, p. 20.

⁷³ H.A. Gordon to Under-Secretary, Mines Department, 20 May 1884, *AJHR*, 1884, H-9, p. 1.

⁷⁴ *Te Aroha News*, 11 October 1884, p. 7.

⁷⁵ *Waikato Times*, 15 November 1884, p. 2; Te Aroha Warden's Court, Register of Licensed Holdings 1881-1887, folios 18, 22, BBAV 11500/9a, ANZ-A.

⁷⁶ *Thames Advertiser*, 3 March 1885, p. 3.

⁷⁷ *Te Aroha News*, 4 April 1885, p. 2.

⁷⁸ *Te Aroha News*, 6 June 1885, p. 2.

had been obtained from 326 tons, the average yield had been only 18dwt 20gr per ton.⁷⁹

In April 1884, the directors of the Waitoki Company regretted that the past year's work 'had not been such as to enable them to present a satisfactory report', but claimed to be still hopeful because the 'character of the country' was 'most favourable'.⁸⁰ They had expected the reefs to be payable, but the return from the crushing was 'far from payable, while the gold was less valuable than in other mines. The Directors then determined to reduce the expenditure by confining the operations to prospecting, but no payable reef had yet been discovered'.⁸¹ When Cameron resigned as manager at the beginning of May, the directors praised his work and regretted 'that owing to the extreme dullness of the times they are obliged to suspend operation in the Mine'.⁸² No more ore was crushed, and both the Waitoki and Waitoki Extended were forfeited for non-working in the following March.⁸³ Two months later, Peter Ferguson⁸⁴ acquired the former for £1 1s.⁸⁵

THE SILVER KING, 1885-1886

After the Waitoki was abandoned because of unpayable ore, in August 1885 part of it, eight men's ground named the Silver King, was occupied by a party comprising Henry Hopper Adams, a leading mine manager,⁸⁶ Hugh McLiver, a mine manager who worked for Adams,⁸⁷ Annie Clifton Firth, wife of Josiah Clifton Firth, an owner of the Waiorongomai battery,⁸⁸ and

⁷⁹ H.A. Gordon to Minister of Mines, 5 May 1887, *AJHR*, 1887, C-5, p. 32.

⁸⁰ *Auckland Weekly News*, 3 May 1884, p. 13.

⁸¹ *Thames Advertiser*, 1 May 1884, p. 2.

⁸² D.G. MacDonnell to Edward Cameron, 5 May 1884, Mines Department, MD 1, 87/583, ANZ-W.

⁸³ H.A. Gordon to Minister of Mines, 5 May 1887, *AJHR*, 1887, C-5, p. 32; Te Aroha Warden's Court, Register of Licensed Holdings 1881-1887, folios 87, 116, BBAV 11500/9a, ANZ-A.

⁸⁴ See paper on Peter Ferguson and his New Era.

⁸⁵ Warden's Court, *Te Aroha News*, 2 May 1885, p. 7.

⁸⁶ See paper on his life.

⁸⁷ See papers on Henry Hopper Adams and on the New Find mine.

⁸⁸ See paper on the Battery Company.

two of their sons.⁸⁹ One month after taking up the ground, McLiver obtained one month's protection (he had asked for two) 'to allow time to ascertain the result of a sample of ore shipped to Melbourne for treatment'. He promised to employ two men 'continuously'.⁹⁰ These men were opening up the mine and seven tons were ready for testing in Thames.⁹¹ In the following week this quantity was reported to be five tons, which was be treated by the LaMonte smelter erected at Karangahake.⁹² Early in October, another ten tons were broken out for the same purpose.⁹³ Late in November, shareholders were so dissatisfied by the price offered that they brought the five tons back to be treated at Waiorongomai.⁹⁴ From 32 tons crushed before April 1886, 63oz were obtained.⁹⁵ As this meant an average yield of 1oz 19dwt 9gr per ton, no mining took place during the following 12 months.⁹⁶

SUNNY CORNER

In August 1885, John Hawkins, a miner,⁹⁷ after having owned the Sunny Corner, part of the adjoining Silver King, for just over two weeks, sold it to McLiver for £10.⁹⁸ The consequence was a plaint against the latter by another miner, Thomas Frederick Fenton:⁹⁹

⁸⁹ Te Aroha Warden's Court, Mining Applications 1885, Silver King, August-September 1885, BBAV 11289/11a; Licensed Holdings Grant Book 1882-1886, claims 169, 188, BBAV 11549/1b, ANZ-A.

⁹⁰ Te Aroha Warden's Court, Mining Applications 1885, Silver King, August-September 1885, BBAV 11289/11a, ANZ-A.

⁹¹ *Te Aroha News*, 19 September 1885, p. 2.

⁹² *Te Aroha News*, 26 September 1885, p. 2.

⁹³ *Te Aroha News*, 10 October 1885, p. 2.

⁹⁴ *Te Aroha News*, 28 November 1885, p. 2.

⁹⁵ George Wilson to Warden, 10 April 1886, *AJHR*, 1886, C-4A, p. 7.

⁹⁶ H.A. Gordon to Minister of Mines, 5 May 1887, *AJHR*, 1887, C-5, p. 32.

⁹⁷ See *Te Aroha News*, 6 February 1887, p. 2, 23 June 1888, p. 2; *Thames Advertiser*, 21 August 1893, p. 2, 6 February 1894, p. 2, 5 November 1894, p. 2.

⁹⁸ Te Aroha Warden's Court, Register of Te Aroha Claims 1880-1888, folio 323, BBAV 11567/1a, ANZ-A; *Waikato Times*, 17 September 1885, p. 2; *Te Aroha News*, 26 September 1885, p. 2..

⁹⁹ See paper on prospectors' and miners' skills.

Plaintiff complained that on the 11th August defendant marked out a claim called the Silver King ... in an illegal manner, viz: That such claim was marked out surrounding a claim known as the Sunny Corner then in possession of and marked out by John Hawkins and not abandoned by him ... and further by failing to cause to be erected at every angle thereof a post as required by law....

Plaintiff claimed to be put in possession of the Silver King on the ground that the Sunny Corner was not abandoned until one hour after the Silver King had been pegged out by defendant....

A[dam] Menzies, [warden's] clerk,¹⁰⁰ stated: He received a notice of pegging out of the Silver King about 12 o'clock on the day stated, from McLiver. Hawkins had given notice of abandoning the Sunny Corner about half an hour previously....

McLiver saw him the previous day and informed him he was purchasing Hawkins' interest in the Sunny Corner, and asked him the best way to get his name substituted for Hawkins. He said he wanted to also include some more ground. Suggested as the easiest way, that he should get Hawkins to abandon the Sunny Corner and for him to peg out the larger area....

Hugh McLiver, sworn, stated the Silver King claim was marked out and registered in his own and H.H. Adams' name.... Previous to marking out the Silver King he purchased the Sunny Corner for £10 from J. Hawkins, viz, on August 10th. Hawkins was to receive a further sum of £5 if the quartz sent away for treatment proved payable....

Christopher Guy¹⁰¹ ... stated that he remembered McLiver instructing him to mark out a claim of eight men's ground called the Silver King, and did so on 11th August. McLiver told him to start at 11 o'clock and get his pegs ready; he said he was going to Te Aroha with Hawkins to fix up matters, and give notice of pegging out the Silver King. I finished pegging the ground at 10 to 12. The intention was to first abandon the one and then mark out the other. It took me about 20 minutes to get my pegs ready. I have been working on the ground ever since, and another man with me, on the Sunny Corner portion of it. Hawkins showed us the Sunny Corner pegs. This ground was included in the Silver King claim.

The warden 'remarked that the case had narrowed down to a dispute respecting one man's ground' pegged out 'in a valid and legal manner' and noted that Fenton had taken 'no steps in the matter for three weeks'.

¹⁰⁰ See, for instance, Adam Menzies to Warden, 11 October 1886, Mines Department, MD 1, 86/2182, ANZ-W; Magistrate's Court, *Te Aroha News*, 25 February 1888, p. 2.

¹⁰¹ See paper on Peter Ferguson and his New Era.

During that time, McLiver had been ‘working the ground, and perhaps the ground in that time had proved valuable. It was not as if both parties had pegged out the same ground in dispute on the same day, and within an hour or so of each other’, and he ‘failed to see upon what grounds Fenton came before him and claimed another man’s ground’. Fenton was non-suited, and ordered to pay costs.¹⁰²

THE SUCCESS, 1886-1889

At the beginning of September 1886, John McLeod Murray and Philip Robert Tringham took up seven men’s ground in the former Waitoki Extended and renamed it, with typical optimism, the Success.¹⁰³ Murray was a clerk and accountant as well as, briefly, a storekeeper.¹⁰⁴ He had interests in five other claims and the company formed to work one of these, and had become an owner of the adjoining Ruby in 1882, an unsuccessful claim forfeited in March 1884.¹⁰⁵ In 1886 he was described as ‘a large shareholder’ in the Success.¹⁰⁶ Tringham had mined during the 1870s at Coromandel.¹⁰⁷ In 1882 he worked in the Coquette at Waiorongomai and held shares in the company of that name as well as in the Waitoki Extended

¹⁰² Warden’s Court, *Te Aroha News*, 26 September 1885, p. 7.

¹⁰³ Te Aroha Warden’s Court, Register of Te Aroha Claims 1880-1888, folio 139, BBAV 11567/1a, ANZ-A; Te Aroha Correspondent, *Waikato Times*, 9 October 1886, p. 2.

¹⁰⁴ See Mines Department, MD 1, 87/1298, ANZ-W; *Te Aroha News*, 22 March 1884, p. 2, 7 March 1885, p. 7, 23 January 1886, p. 2, 20 February 1886, p. 2, 3 July 1886, p. 2, advertisement, 15 January 1887, p. 3, 27 August 1887, p. 2, 24 September 1887, p. 3; *Waikato Times*, 14 August 1888, p. 2, 15 November 1888, p. 2. For details of his life, see chapter on William Archibald Murray.

¹⁰⁵ Te Aroha Warden’s Court, Register of Te Aroha Claims 1880-1888, folio 327, BBAV 11567/1a; Register of Licensed Holdings 1881-1887, folios 39, 40, 45, 99, BBAV 11500/9a; Letterbook 1883-1900, p. 22, BBAV 11534/1a, ANZ-A; *New Zealand Gazette*, 14 December 1882, p. 1884.

¹⁰⁶ *Te Aroha News*, 9 October 1886, p. 2.

¹⁰⁷ See *Auckland Weekly News*, 27 August 1870, p. 5, 21 January 1871, p. 6, 29 June 1878, p. 8, 7 September 1878, p. 8; *Coromandel Mail*, 14 April 1874, p. 3; *New Zealand Gazette*, 6 June 1878, p. 732.

claim and company, and was sole owner of one claim and part owner of another four.¹⁰⁸

In mid-September 1886, Tringham led a prospecting party that soon found a good reef. To provide easy access to the tramway, a level was being driven on it which would provide 30 feet of backs.¹⁰⁹ The *Te Aroha News* noted that the discovery of this entirely new reef was ‘partly a result of the prospecting track recently made’ by the council running from Buck Rock to the end of the tramway extension from the top of Butler’s Incline.

It is from this track it is being worked, along this track the quartz is sledged, and in fact the reef was first touched during the formation of the track, although it did not at the time attract attention. The reef now opened up in the winze is from 2ft 6in to 3ft carrying gold from wall to wall, and apparently as rich as what has already been taken out.¹¹⁰

A local correspondent noted that ‘a little work was done, but with indifferent success, by the company who first owned’ the ground. He expected prospecting was ‘likely to be well rewarded’, for the new vein was two feet wide and contained ‘excellent’ stone. Two trucks of ‘general dirt’ and 30lb of ‘selected stuff’ had been crushed for over 60oz of ‘hard amalgam calculated to give fully 15oz gold’.¹¹¹ The *Te Aroha News* described this as a ‘very excellent return’, and noted that ‘gold obtained from a similar parcel crushed a few weeks since realized £3 per ounce. Extra hands will be put on as fast as the mine becomes opened up’.¹¹² Six men were employed in mid-October, when two truckloads returned 11oz of retorted gold.¹¹³ Shortly afterwards, the winze was down 17 feet, and showing good prospects. The council was asked to extend the branch tramway four-and-a-half chains to

¹⁰⁸ Te Aroha Warden’s Court, Register of Te Aroha Claims 1880-1888, folios 142, 148, BBAV 11567/1a; Register of Licensed Holdings 1881-1887, folios 8, 88, BBAV 11500/9a; Plaintiff Book 1880-1898, 49/1882, BBAV 11547/1a, ANZ-A; Warden’s Court, *Te Aroha Mail*, 10 June 1882, p. 2; *New Zealand Gazette*, 16 November 1882, p. 1733, 14 December 1882, p. 1885; *Te Aroha News*, 15 August 1885, p. 7, Piako County Council, 4 September 1886, p. 2.

¹⁰⁹ *Te Aroha News*, 18 September 1886, p. 2, 25 September 1886, p. 2.

¹¹⁰ *Te Aroha News*, 9 October 1886, p. 2.

¹¹¹ Te Aroha Correspondent, *Waikato Times*, 9 October 1886, p. 2.

¹¹² *Te Aroha News*, 9 October 1886, p. 2.

¹¹³ *Te Aroha News*, 16 October 1886, p. 2.

the claim, and about a dozen experienced prospectors rushed the area.¹¹⁴ By the time the tramway extension was completed, one month later, another three trucks had produced 4oz 4dwt of retorted gold, and another six were ready for treatment.¹¹⁵ These produced 9oz 5dwt of melted gold. By early December, miners were stoping south of the winze and carrying the drive northwards, 'with gold showing every breaking down'.¹¹⁶ As the first crushings had returned one and a half ounces to the ton, several parties were 'prospecting in the vicinity'.¹¹⁷ Another parcel was tested in mid-December.¹¹⁸

'Steady work' continued during the following January, when stone of specimen quality was found in the stope.¹¹⁹ At the beginning of March, 25lb of picked stone produced 3oz 16dwt.¹²⁰ Late that month, the low level had been driven 150 feet, with another 90 to go before striking the reef; they expected to cut another one before then.¹²¹ The warden reported in early April that the owners had done 'a considerable amount of work' since August. From 36 tons, 36 ounces had been produced, and another ten tons 'of quartz of better quality is stacked at the mine ready to be sent to the battery. The reef worked varies from 6in to 18in in thickness'.¹²² When the battery could not operate because of lack of water, 80 truckloads were sent to Thames.¹²³

The low level had been driven 210 feet by early April.¹²⁴ Whether it reached the reef or cut another one was not recorded, as nothing was reported on this mine until the following year. In the previous November and December, Tringham had transferred all his interests to Murray and Thomas George Marlow,¹²⁵ possibly reflecting his lack of confidence in the

¹¹⁴ *Te Aroha News*, 23 October 1886, p. 2.

¹¹⁵ *Te Aroha News*, 30 October 1886, p. 2, 27 November 1886, p. 2.

¹¹⁶ *Te Aroha News*, 4 December 1886, p. 2.

¹¹⁷ *Te Aroha News*, 4 December 1886, p. 2; *Waikato Times*, 11 December 1886, p. 3.

¹¹⁸ *Waikato Times*, 11 December 1886, p. 3.

¹¹⁹ *Te Aroha News*, 22 January 1887, p. 2, 29 January 1887, p. 2.

¹²⁰ *Te Aroha News*, 5 March 1887, p. 2, 12 March 1887, p. 2.

¹²¹ *Te Aroha News*, 26 March 1887, p. 2.

¹²² Warden to Under-Secretary, Mines Department, 7 April 1887, *AJHR*, 1887, C-6, p. 6.

¹²³ *Te Aroha News*, 2 April 1887, p. 2.

¹²⁴ *Te Aroha News*, 9 April 1887, p. 2.

¹²⁵ Te Aroha Warden's Court, Register of Te Aroha Claims 1880-1888, folio 139, BBAV 11567/1a, ANZ-A.

prospects. Marlow, a commercial traveller,¹²⁶ acquired another investor's interest in the mine in August 1887.¹²⁷ At the beginning of March 1888, ten tons were ready for treating in Thames.¹²⁸ In April 1888, the mining inspector reported that 25 tons taken from a small reef had produced about a quarter of an ounce per ton.¹²⁹

In April 1888, Marlow and Murray were charged with non-working by a miner and contractor, Henry John Hyde.¹³⁰ A shareholder in the Waitoki Extended in mid-1882, Hyde had purchased interests from Tringham and others.¹³¹ In what was described as an 'important mining case', Hyde's solicitor argued that, according to the 1873 Act, in force when the Success was taken up, it had 'to be worked by at least one man for every 15,000 square feet, known as one man's ground', meaning 15 men should have been employed. 'It had not been ever worked with fifteen men, part of the time had not been worked at all, and part of the time with only one or two men'. When questioned, George Wilson, the mining inspector,¹³² did not remember being asked by Samuel Luther Hirst 'the number of men required to work' it.¹³³ (Hirst, an amalgamator at the battery who became a cordial manufacturer, agent, and eventually a prosperous Auckland land developer,¹³⁴ was active in local organizations, becoming chairman of the

¹²⁶ See Warden's Court, *Te Aroha News*, 25 April 1888, p. 2; *Auckland Weekly News*, 17 January 1891, p. 15.

¹²⁷ Te Aroha Warden's Court, Register of Te Aroha Claims 1880-1888, folio 139, BBAV 11567/1a, ANZ-A.

¹²⁸ *Te Aroha News*, 3 March 1888, p. 2.

¹²⁹ George Wilson to Under-Secretary, Mines Department, 4 April 1888, *AJHR*, 1888, C-6, p. 12.

¹³⁰ See Mines Department, MD 1, 1900/260, 1900/495, ANZ-W; Piako County Council, Letterbook 1898-1901, p. 279, Matamata-Piako District Council Archives, Te Aroha; *Te Aroha News*, 4 April 1885, p. 2, 29 August 1885, p. 2, 7 November 1885, p. 2, 13 February 1886, p. 7, 10 April 1886, p. 2, 24 April 1889, p. 2; *Thames Advertiser*, 22 May 1899, p. 3; *Waikato Times*, 25 October 1926, p. 6.

¹³¹ Te Aroha Warden's Court, Register of Licensed Holdings 1881-1887, folio 88, BBAV 11500/9a, ANZ-A.

¹³² See paper on his life.

¹³³ Warden's Court, *Te Aroha News*, 25 April 1888, p. 2.

¹³⁴ *Cyclopedia of New Zealand*, vol. 2, p. 829; *Observer*, 17 January 1925, p. 4; *New Zealand Herald*, 7 May 1934, p. 12.

town board and mayor.¹³⁵ He was an enthusiastic investor in local mines.)¹³⁶ Wilson recalled being asked, ‘about the beginning of this year’, when protection would expire, by Alexander Watson Edwards, a draper,¹³⁷ who did not hold any interest. ‘I believe he asked the question on behalf of Auckland shareholders’. Under the Act of 1886, only four men would be required to work the ground. Hyde then gave evidence:

I know the Success Claim, and worked in it about November or December 1886. From my knowledge of the boundaries I should say the claim was about three and a half acres, and the line of reef in the ground about four chains. There are two defined reefs in the ground. I was on the claim twice in December and once in January, and went into the workings. No one was working, nor did the mine present the appearance of any work going on on either of these occasions. I was there again in March. A man named [Thomas] Kirker was at work when I visited the claim in March. I believe another man was put on about the 22rd March. I wish the Court to give me an order to take possession of the claim.¹³⁸

(Kirker, an experienced miner, had been an underground manager in Thames in the 1870s and managed several Waiorongomai mines between 1885 and 1890.)¹³⁹ Hyde was cross-examined by Marlow’s counsel:

I was a workman in the Success Claim, and was aware it had been protected, and knew the protection expired in November. I did not go expressly for the purpose of seeing whether the claim was liable to be forfeited in December or January, but did go for that purpose in March. I swear there is no one else interested in this application but myself. I am not under a verbal agreement to give shares to anybody in the event of my getting the claim. Mr Cornes has spoken to me several times about the ground, both before and since I laid the plaint. Mr [Clement Augustus] Cornes

¹³⁵ See *Auckland Weekly News*, 20 August 1892, p. 29, 8 May 1902, p. 25, 15 May 1902, p. 33; *Thames Star*, 3 April 1902, p. 4; *Cyclopedia of New Zealand*, vol. 2, pp. 828, 829.

¹³⁶ For example, *New Zealand Gazette*, 30 December 1880, p. 1796, 20 January 1881, p. 111, 24 February 1881, p. 258, 6 September 1883, p. 1266.

¹³⁷ See paper on Ani and Alexander Watson Edwards.

¹³⁸ Warden’s Court, *Te Aroha News*, 25 April 1888, p. 2.

¹³⁹ See Mines Department, MD 1, 92/34, ANZ-W; *Thames Advertiser*, 5 March 1886, p. 3; *Te Aroha News*, 13 March 1886, p. 2; *Auckland Weekly News*, 28 January 1893, p. 18.

[another miner]¹⁴⁰ never asked me to give him a “show” if I got the ground. I have had no conversation with either Mr [James] Don [a local publican]¹⁴¹ or Mr Murray on the subject. The money to enable me to take up this case was lent me by Mr Don. I simply asked Mr Don for the loan of the money, and he gave it to me; I do not think he knew what I wanted it for. Mr Don is not one of those who stand in with me.¹⁴²

As Hyde stated, Cornes did not seek an interest, being fully taken up with his Tui claims.¹⁴³ Don invested in other claims,¹⁴⁴ but not in this one. Hyde held ‘no other claim’ and said there was ‘plenty of room to peg off ground without laying this plaint’. He had been working for Cornes ‘on and off since I came back from the West Coast in November last’. Next, Kirker was examined:

I have been working lately in the Success mine, Waiorongomai. Myself and a man named McLeod¹⁴⁵ went to work on 26th January, and we worked for thirty-three days before we knocked off; and I then went to Maratoto for one week, after which I returned and resumed work for ten days by myself, when McLeod again joined me, and we have worked there till now. Mr S. Hirst engaged me to work in the claim on behalf of Murray’s estate.

(Murray had been forced to assign his estate to his creditors in late 1887.)¹⁴⁶ ‘During the past four months’ an unspecified amount of quartz had been sent to Thames.¹⁴⁷ Although a sample assayed for Marlow in February

¹⁴⁰ See paper on his life.

¹⁴¹ For example, *Te Aroha News*, 28 May 1887, p. 2, 20 July 1889, p. 2.

¹⁴² Warden’s Court, *Te Aroha News*, 25 April 1888, p. 2.

¹⁴³ See paper on his life.

¹⁴⁴ For example, Te Aroha Warden’s Court, Register of Te Aroha Claims 1880-1888, folios 137, 140, BBAV 11567/1a, ANZ-A; Te Aroha Correspondent, *Thames Advertiser*, 8 October 1886, p. 3.

¹⁴⁵ Recorded as McCloud, he was either Alexander or Donald McLeod: see Te Aroha Warden’s Court, Register of Te Aroha Claims 1880-1888, folio 335, BBAV 11567/1a, ANZ-A; *Te Aroha News*, 5 September 1888, p. 2, 23 February 1889, p. 7, 23 March 1889, p. 2; *Auckland Weekly News*, 27 October 1888, p. 37.

¹⁴⁶ See *Te Aroha News*, advertisement, 24 September 1887, p. 3, 8 October 1887, p. 3, 29 October 1887, p. 3.

¹⁴⁷ Warden’s Court, *Te Aroha News*, 25 April 1888, p. 2.

1888 had produced 8oz 16dwt 9gr, tailings tested in early March produced only 2dwt 12gr, and stone tested in April gave only 3dwt 19gr.¹⁴⁸

Hirst explained that an undisclosed amount was crushed in Thames for an unstated return. Acting as an agent for the trustees of Murray's estate, he had been 'paid 12s 6d per week since January to look after the mine. I engaged two men in January last. I had no definite instructions to employ more or less. I also saw to the despatch of quartz to Thames, etc'. Instructed 'to put on sufficient men to hold the ground', he 'thought two men would suffice. The wages were paid by the Trustees through me'. They informed him that Marlow 'was interested in the claim'. He produced their letter asking, 'If you acted on our instructions by keeping men at work in the mine, how is it a plaint is laid?' Instructed 'to do what was necessary' to hold the ground, in March he had asked Wilson how many should be employed and was told 'about three and a half'.

Marlow declared he had a one-seventh interest:

I am a commercial traveller, my head quarters being in Auckland. I am part owner of the Success Claim, and the remainder is owned by the Trustees of Murray's estate. Being greatly absent from Auckland myself, I empowered Mr Burns (of Wingate Burns and Co.) to act on my behalf. I visited the ground twice since the beginning of the year, and on each occasion two men were at work there. I saw Mr Hirst in both February and April, and understood from him he had done what was necessary. In December I saw Mr Edwards, of Te Aroha, at Thames, and asked him to enquire if the claim was protected, and he telegraphed to me the claim was fully protected until 6th Feb. (Certified copy of telegram put in.)

The last man to give evidence, the lawyer Burns, explained that he

understood from both Mr Marlow, and also from one of our clerks, who was down here, that the Success Claim was fully protected up to Feb. 6th. I instructed Mr Hirst to look after the claim, and also to take out a crushing. There were no circumstances to lead us to suppose the ground was not fully protected.¹⁴⁹

Instead of forfeiting their ground, Murray and Marlow were fined £5 and had to pay £10 18s in costs, for 'no willful and continuous neglect to

¹⁴⁸ Thames School of Mines, Assay Book 1887-1889, entries for 24 February 1888, 9 March 1888, 13 April 1888, School of Mines Archives, Thames.

¹⁴⁹ Warden's Court, *Te Aroha News*, 25 April 1888, p. 2.

work their mine had been proved'.¹⁵⁰ This decision 'gave great satisfaction; the hope being freely expressed that the claim would not be forfeited, as a large amount of money has been expended upon it from time to time' and 'a great deal of work' done.¹⁵¹

In July 1888, Marlow was granted the Success No. 2, 15 acres adjoining Peter Ferguson's ground¹⁵² and with the Silver King to the northwest.¹⁵³ Thirteen days after being granted it, he applied for three months' protection, which was granted at the beginning of September.¹⁵⁴ Further protection was granted in December and in the following month.¹⁵⁵ The justification was that the ground was under offer to an English company,¹⁵⁶ as he explained in August:

Firstly, That the ground has been worked on behalf of myself and partners for the past two years.

Secondly, That a very large amount of work has been done, in the way of prospecting and opening up the ground, consisting of a winze 75 feet deep, a tunnel over three hundred feet, and several drives in different parts of the ground.

Thirdly, That we have a well defined gold bearing reef, two feet thick, the assay value of which reaches as much as £40.0.0 per ton, but the ore being of a refractory nature, the Battery process will not save it, therefore it is useless in the mean time to stope it out.

Fourthly, That the present owners being unequal to the introduction of the necessary plant to save the bullion (they having already spent over a thousand pounds) it becomes necessary to introduce outside Capital.

¹⁵⁰ Te Aroha Warden's Court, Plaint Book 1880-1898, 10, 24/1888, BBAV 11547/1a, ANZ-A; Warden's Court, *Te Aroha News*, 28 April 1888, p. 2.

¹⁵¹ *Thames Advertiser*, 26 April 1888, p. 2; *Te Aroha News*, 28 April 1888, p. 2.

¹⁵² See paper on Peter Ferguson and his New Era.

¹⁵³ Te Aroha Warden's Court, Register of Applications for Licensed Holdings 1888-1903, folio 9, BBAV 11505/8a, ANZ-A.

¹⁵⁴ Te Aroha Warden's Court, Register of Applications 1883-1900, 55, 74/1888, BBAV 11505/1a; Mining Applications 1888, 85/1888, BBAV 11289/12a, ANZ-A.

¹⁵⁵ Te Aroha Warden's Court, Mining Applications 1885, 85/1888, BBAV 11289/12a, ANZ-A.

¹⁵⁶ Te Aroha Warden's Court, Register of Applications 1883-1900, 55/1888, BBAV 11505/1a, ANZ-A.

Fifthly, that the property is now under offer to a London firm a member of which inspected the ground in May last, and made a conditional offer for it.

Sixthly, That the plan of the ground having only gone Home to London by the July Mail, there must necessarily be a lapse of two or three months before the purchase can be completed.¹⁵⁷

As noted, earlier assays had not been encouraging, and a final sample, tested in September, produced only 1oz 17dwt 19gr.¹⁵⁸ It was not surprising, therefore, that the unnamed 'London firm' did not acquire it. When applying, successfully, for another three months' protection in January 1889, Marlow claimed to have spent over £200. When he stated there was no 'satisfactory' treatment, the warden warned that at the end of this period the ground must be worked, for by then 'probably two processes would be available'.¹⁵⁹ Instead, Marlow abandoned it.

In addition to his mining investments, Marlow leased grazing land at Matata.¹⁶⁰ At the beginning of 1891, when he became bankrupt, owing £1,056 10s 6d, his only asset was his furniture, valued at £50. Although his average annual income had been £300, illness in the family had forced him to borrow money so he could purchase a house in Ponsonby. 'I have been in the habit of speculating in mining scrip', he informed the assignee. 'In order to clear off my liabilities I ventured on mining speculations which appeared to offer good prospects. To enable me to do this I borrowed money at high rates of interest – as high as 60 per cent. In this way I have lost between £600 and £700 within the last five years'.¹⁶¹

Murray's involvement was more profitable. In October 1886, one month after acquiring half the interest, he sold one-seventh of it 'at a satisfactory price', £25, and two months later sold two more shares.¹⁶² Two

¹⁵⁷ T.G. Marlow to Warden, 17 August 1888, Te Aroha Warden's Court, Mining Applications 1888, 74/1888, BBAV 11289/12a, ANZ-A.

¹⁵⁸ Thames School of Mines, Assay Book 1887-1889, entry for 25 September 1888, School of Mines Archives, Thames.

¹⁵⁹ Warden's Court, *Te Aroha News*, 23 January 1889, p. 2.

¹⁶⁰ Crown Lands Board, *Auckland Weekly News*, 27 July 1889, p. 9.

¹⁶¹ Auckland Supreme Court, Bankruptcy Register 1884-1927, folio 133, BAEA 11029/1a, ANZ-A; *New Zealand Herald*, 12 January 1891, p. 3, 15 January 1891, p. 3, 22 January 1891, p. 3.

¹⁶² Te Aroha Warden's Court, Register of Te Aroha Claims 1880-1888, folio 139, BBAV 11567/1a; J.M. Murray to James Wigg, 19 October 1886; J.M. Murray to J.B. Smith, 24

years later, he owned two other claims,¹⁶³ and in 1889, after ceasing to be town clerk, headed a party of mining contractors.¹⁶⁴

In March 1889, Hirst forfeited the Success for not working it in accordance with the conditions.¹⁶⁵ In August, with a miner, James Goard,¹⁶⁶ Murray applied for the Nil Desperandum, two men's ground with the Silver King to the northwest, but withdrew the application one month later.¹⁶⁷ They both applied for the Success later that month, starting work immediately, cleaning out the 'old drive' and sending three truckloads to the battery.¹⁶⁸ Goard had previously mined in the Success, in November 1887 suing one owner, John Bealby Smith,¹⁶⁹ for wages amounting, he claimed, to £100; the warden granted £30.¹⁷⁰ Clearly the sample proved unpayable, as nothing further was reported about the Success, which, as so often, had not lived up to its optimistic name.

THE SILVER KING, 1888-1893

Mining revived in 1888 because of interest in silver; earlier, miners had focused on gold. In February, when 'some stone rich in silver' was obtained in the Silver King, McLiver and another leading miner, Thomas Gavin,¹⁷¹ applied for it, along with the Porotorau, of one man's ground. John

December 1886, Certified Instruments 1886, BBAV 11581/7a, ANZ-A; *Te Aroha News*, 16 October 1886, p. 2.

¹⁶³ Te Aroha Warden's Court, Register of Applications 1883-1900, folios 60, 64, BBAV 11505/1a, ANZ-A.

¹⁶⁴ *Te Aroha News*, 9 March 1889, p. 2, 24 April 1889, p. 2, 11 May 1889, p. 2, 22 May 1889, p. 2.

¹⁶⁵ Te Aroha Warden's Court, Complaint Book 1880-1898, 4/1889, BBAV 11547/1a, ANZ-A; Warden's Court, *Te Aroha News*, 6 March 1889, p. 2; *AJHR*, 1888, C-6, p. 12.

¹⁶⁶ See *Waikato Times*, 28 April 1892, p. 3; *Te Aroha News*, 27 April 1895, p. 2; *Bay of Plenty Electoral Ross, 1903*, p 27.

¹⁶⁷ Te Aroha Warden's Court, Register of Applications 1883-1900, 57/1889, BBAV 11505/1a, ANZ-A.

¹⁶⁸ *Te Aroha News*, 24 August 1889, p. 2.

¹⁶⁹ See paper on the Waitoa Find.

¹⁷⁰ Thames Warden's Court, Civil Record Book 1887-1890, 38/1887, BACL 13735/2c, ANZ-A; Magistrate's Court, *Te Aroha News*, 26 November 1887, p. 3.

¹⁷¹ See paper on his life.

Goldsworthy, an experienced miner,¹⁷² was prospecting the area with a mate, and 'several shares' had 'recently been disposed of'.¹⁷³ The names of all the shareholders are not known, but included Adams, McLiver, Gavin, James McCosh Clark of the Battery Company,¹⁷⁴ Annie Clifton Firth, and two of her sons.¹⁷⁵ At the beginning of March, the *Te Aroha News* was optimistic about this 'very important' find:

This claim is likely to prove a good thing for the shareholders, and is already attracting a good deal of attention, and shares have greatly increased in value. The ground includes what was formerly known as the Waitoki, and adjoins the old Werahiko Claim. Fifteen acres have been applied for.... What is now known as the Silver King, includes ground formerly known as the Porotorau and Hopeful. The reef is well defined from the northern to the southern boundary of the claim, and varies from six feet to sixteen feet. Wherever the reef has been cut through, the quartz broken out has, on being submitted to assay, shown gold and silver in highly payable quantities. Some of the quartz contains a considerable percentage of carbonate of copper, and it is from this class of stone the best results have been obtained.

Four men were employed.¹⁷⁶ The two highest returns from nine assays made between the beginning of February and the beginning of March were both of 137oz per ton, valued at £46 2s 3d and £46 2s. These were exceptional; the next highest was 72oz, worth £26 13s 3d, and the other values were £26 1s, £18 17s 6d, £16 18s, £14 1s 3d, and two at £6 6s.¹⁷⁷ By mid-March, the Silver King reef had been tested over 1,100 feet at several points, reportedly with universally good results. A level commenced to cut it about 60 feet below the surface was expected to hit it at the same

¹⁷² See paper on the Goldsworthy brothers.

¹⁷³ *Te Aroha News*, 25 February 1888, p. 2.

¹⁷⁴ See paper on this company.

¹⁷⁵ Te Aroha Warden's Court, Register of Te Aroha Claims 1880-1888, folio 133, BBAV 11567/1a; Licensed Holdings Grant Book 1882-1886, claims 169, 188, BBAV 11549/1b; Agreement between Te Aroha Silver and Gold Mining Company and Thomas Gavin and Hugh McLiver, 6 June 1888, Certified Instruments 1888, BBAV 11581/9a, ANZ-A; *Te Aroha News*, 24 March 1888, p. 2.

¹⁷⁶ *Te Aroha News*, 3 March 1888, p. 2.

¹⁷⁷ *Te Aroha News*, 21 April 1888, p. 4.

distance.¹⁷⁸ ‘Excellent stone’ had been obtained ‘for some time’.¹⁷⁹ Three trucks yielded 14oz 6dwt of gold, and ‘rich assays’ indicated payable quantities of gold, silver, and copper.¹⁸⁰ The mining inspector arranged for ten tons to be sent to the Adelaide Smelting Works ‘in order that the necessary fluxes may be ascertained’.¹⁸¹

In late March, Adams reported on developments:

The ground comprises about 15 acres, and is situated at the top of the second self-acting grade of the tramway, known as Butler’s Spur. The reef in this property has been prospected for a length of 1100 feet, and varies in width from six to 16 feet, showing gold and silver in every place we have worked upon....

A crosscut is now being driven to cut the reef down a distance of about 60 feet, which may be expected to be reached in the course of a month.

Another reef appears on the western portion of the ground, which is about six feet wide, carrying gold and silver.

The mine has excellent natural facilities for working, being easily connected with the present tramway. The surface, being wooded, has the necessary timber for mining operations.¹⁸²

Encouraged by such reports, William Robert Wilson, then acquiring the Battery Company’s mines and battery on behalf of the syndicate that became the Te Aroha Silver and Gold Mining Company,¹⁸³ purchased the Silver King for £4,000.¹⁸⁴ The owners were commended ‘for disposing of it on such reasonable terms, and not sticking out for an unreasonable price as so many have done in somewhat similar circumstances, most frequently to

¹⁷⁸ *Te Aroha News*, 17 March 1888, p. 2.

¹⁷⁹ *Waikato Times*, 22 March 1888, p. 2.

¹⁸⁰ George Wilson to Under-Secretary, Mines Department, 4 April 1888, *AJHR*, 1888, C-6, p. 11.

¹⁸¹ George Wilson to Under-Secretary, Mines Department, 4 April 1888, *AJHR*, 1888, C-6, p. 12.

¹⁸² H.H. Adams, ‘Report on Silver King Mine’, 26 March 1888, printed in *Te Aroha News*, 21 April 1888, p. 4.

¹⁸³ See paper on this company.

¹⁸⁴ *Te Aroha News*, 24 March 1888, p. 2; Te Aroha Warden’s Court, Agreement between Te Aroha Silver and Gold Mining Company and Thomas Gavin and Hugh McLiver, 6 June 1888, Certified Instruments 1888, 7773/33, BBAV 11581/9a, ANZ-A.

find that in grasping at the shadow they have lost the substance'.¹⁸⁵ At the end of the month, his syndicate let a contract at 18s 6d per foot to six men to complete the new level.¹⁸⁶ When surveyed in April, their ground was found to be 11 acres and 10 perches, extending from the top of Butler's Incline to the southern end of the tramway extension, where it adjoined the Success.¹⁸⁷

On the last day of April, the new level struck the reef.

The country passed through was all that could be desired, and the reef presents the most promising appearance, the stone broken out being fully equal to any yet obtained from this claim. This is a circumstance of great importance, fully sustaining the high reputation of the mine. The Werahiko mine will also be greatly enhanced in value by the improved prospects in the Silver King, as the reef at present dips fair to enter the Werahiko ground, at a distance of only a few chains.¹⁸⁸

Tenders were called to drive north and south on the reef and sink a winze from the surface and connecting with the junction of these drives.¹⁸⁹ They were let at £1 17s 6d per foot for driving 100 feet both north and south on the reef and £1 4s 6d per foot for the winze.¹⁹⁰ One month later, the winze 'holed through', providing an

abundance of ventilation for driving on the reef both north and south. The drive north on the Silver King is now in a distance of 40 feet, and the reef, which is about 6 feet wide, shows a little sulphide of silver every breaking down. The drive south on the same reef is also in about 40 feet, the reef now being about 4 feet wide.¹⁹¹

¹⁸⁵ *Te Aroha News*, 24 March 1888, p. 2.

¹⁸⁶ *Te Aroha News*, 31 March 1888, p. 2, 4 April 1888, p. 2, 7 April 1888, p. 2, 21 April 1888, p. 2; *Waikato Times*, 5 April 1888, p. 2.

¹⁸⁷ Plan of Silver King Licensed Holding, Applied for by Hugh McLiver and Thomas Gavin, April 1888, Museum Archives, Te Aroha.

¹⁸⁸ *Te Aroha News*, 2 May 1888, p. 2.

¹⁸⁹ *Te Aroha News*, 5 May 1888, p. 2, 12 May 1888, p. 2.

¹⁹⁰ *Te Aroha News*, 9 May 1888, p. 2; *Waikato Times*, 15 May 1888, p. 2.

¹⁹¹ *Te Aroha News*, 9 June 1888, p. 2.

By the end of June, both drives were in 70 feet, with good ore being found.¹⁹² Two weeks later, another ten feet had been driven in both, the work 'progressing satisfactorily, and the country being passed through is of a kindly nature'.¹⁹³ But nothing further was reported, and in June 1891 the company forfeited the ground for non-working, along with all its other holdings.¹⁹⁴ Three months later, Adams became sole owner of the Silver King, at ten men's ground slightly smaller than the previous claim.¹⁹⁵ The loss of the local newspaper means that details of work done in the early 1890s cannot be traced, but a small amount was done. In December 1892, the council agreed to extend the tramway 'one chain in the direction of the Silver King Mine'.¹⁹⁶ Adams' syndicate employed four men, who in 1892 and early 1893 obtained 'some very fair ore, containing about 1oz of gold and 20oz of silver'.¹⁹⁷ Subsequently, Adams stoped out a 'surface block', but by July 1893 he had abandoned the claim.¹⁹⁸

The Silver King reef was subsequently traced further northwards; one miner pegged out a claim 'just below the Loyalty workings' near Diamond Gully Creek in mid-1894, and attempted to form a local syndicate to develop it.¹⁹⁹

THE WERAHIKO, 1888-1895

In April 1888, Adams purchased the Werahiko No. 2 and sold interests to his partner Richard Mitchelson,²⁰⁰ Clark, and McLiver.²⁰¹ This

¹⁹² *Te Aroha News*, 30 June 1888, p. 2.

¹⁹³ *Te Aroha News*, 14 July 1888, p. 2.

¹⁹⁴ *Thames Star*, 9 June 1891, p. 2.

¹⁹⁵ Te Aroha Warden's Court, *Plaint Book 1880-1898*, 2-8/1891, BBAV 11547/1a; *Forfeiture of Silver King Licensed Holding*, 9 June 1891, BBAV 11583/4a; *Register of Te Aroha Claims 1880-1888*, folio 324, BBAV 11567/1a, ANZ-A.

¹⁹⁶ Piako County Council, *Minutes of Meeting of 20 December 1892*, Matamata-Piako District Council Archives, Te Aroha.

¹⁹⁷ H.A. Gordon to Minister of Mines, 8 June 1893, *AJHR*, 1893, C-3, p. 72.

¹⁹⁸ *Thames Advertiser*, 17 July 1893, p. 2; George Wilson to Under-Secretary, Mines Department, 7 May 1894, *AJHR*, 1894, C-3A, p. 13.

¹⁹⁹ *Te Aroha News*, n.d., reprinted in *Thames Star*, 7 June 1894, p. 4.

²⁰⁰ See paper on Henry Hopper Adams.

investment was encouraged by the discovery of a good reef in the adjoining Silver King, which was expected to extend into the Werahiko. As a consequence, late that month shares in a forfeited claim purchased for £2 2s ‘changed hands at values representing £1200 for the mine’.²⁰² In September, Adams sent one ton to the Thames School of Mines ‘for experimental purposes’; the return was £15 5s 2d per ton.²⁰³ Encouraged by this, driving commenced in November on ‘a good looking reef’.²⁰⁴ In the following January, ‘quartz of excellent quality’ was being broken out, and the shareholders wanted to erect a small battery on their ground.²⁰⁵

At the beginning of May, tailings were tested at the School of Mines,²⁰⁶ using its new experimental battery, as explained by Alexander Montgomery,²⁰⁷ who did the testing:

This was a test by raw amalgamation in the Railley pan of 1,970lb of quartz from the Werahiko Mine, Waiorongomai, containing fine free gold and sulphide of silver. The ore contained by assay 3oz 19dwt 16gr of gold per ton and 7oz 11dwt of silver. It was crushed wet in a stamp-battery, passed over amalgamated copper plates, and then into the tailings-pits, whence, after settling, it was shovelled and baled into the Railley pan. In the battery we saved 55.7 per cent of the gold and 28.3 per cent of the silver shown to be present by assay. This would represent the saving by the ordinary battery-process. By further amalgamation in the pan the total saving of gold was brought up to 90.5 per cent and of silver to 78.3 per cent, making a total saving of 89.6 of the assay-value. The tailings from the pan still, however, contained 12dwt 14gr of gold and 2oz 10dwt 10gr of silver per ton, so that the extraction was by no means perfect. Still, the pan-treatment showed a great saving above the mere battery-process. An assay of the fine slime in the last settling-pit before pan-treatment gave – gold, 1oz 4gr per ton; and silver, 8oz 3dwt 3gr. The assay of all the tailings, mixed, before pan-treatment gave 1oz 15dwt 7gr of

²⁰¹ Te Aroha Warden’s Court, Transfers to J.M. Clark, Hugh McLiver, and Richard Mitchelson, Certified Instruments 1888, BBAV 11581/9a, ANZ-A; *Te Aroha News*, 11 April 1888, p. 2; *Waikato Times*, 14 April 1888, p. 2.

²⁰² *Te Aroha News*, 2 May 1888, p. 2.

²⁰³ *Te Aroha News*, 22 September 1888, p. 2, 6 October 1888, p. 2.

²⁰⁴ *Te Aroha News*, 1 December 1888, p. 2.

²⁰⁵ *Te Aroha News*, 23 January 1889, p. 2.

²⁰⁶ Thames School of Mines, Assay Book 1887-1889, entry for 5 May 1889, School of Mines Archives, Thames.

²⁰⁷ See *The Handbook of New Zealand Mines* (Wellington, 1887), Appendix, pp. 3-4.

gold and 5oz 8dwt 9gr of silver per ton. This shows that the very finest slime from the battery is nearly as rich as the general bulk. As the fine slime often amounts to 30 or 40 per cent of the whole, the need of saving it carefully is therefore evident.²⁰⁸

In late May, another ton testing there produced 5oz 13dwt of gold.²⁰⁹ Eight subsequent tests of tailings produced two low results, both 17dwt 15gr, the highest being 1oz 16dwt 13gr.²¹⁰ Montgomery reported in detail on the test made on 28 May:

The parcel of ore weighted 3123lb and contained 7.8% of moisture, being thus equal to 2879lb of dry ore. It was treated by first crushing it wet through the 2-stamp battery, using quicksilver in the box, and then collecting all the tailings from the stamps and grinding them in the Railley pan. The ore milled very freely, and yielded ... a good proportion of its gold to the battery plates and ripples. The tailings passed through three large settling-boxes and only a very small proportion escaped being caught in these. After the tailings had settled, the water was drawn off them and the tailings were taken to the Railley pan to be ground and amalgamated.

The first pan charge was worked cold and without the use of any chemicals for six hours. A test from the tailings from this pan showed that they still contained 17dwt 15gr of gold per ton and 1oz 7dwt 18 grains of silver. To try to improve on this the next pan charge was worked hot for six hours with [the] addition of sulphate of copper and salt. At this period of the test I had not had any assays made of the ore, and thought from its appearance that it contained a good deal of silver. This however was not the case and the use of copper sulphate was a great mistake, as the copper reduced [and] coated over all the iron ground off the false bottom and muller²¹¹ and then this copper-coated iron amalgamated with the quicksilver, forming a ~~black~~ sludgy mass of so-called "Iron Amalgam." The tailings from this second pan contained 1oz 0dwt 4 grains of Gold and 1oz 7dwt 17gr of silver per ton. The next two pans were also worked hot but without the addition of any more sulphate of copper but the base amalgam

²⁰⁸ Report by Alexander Montgomery, n.d., printed in H.A. Gordon to Minister of Mines, 8 June 1889, *AJHR*, 1889, C-2, pp. 19-20.

²⁰⁹ *Te Aroha News*, 12 June 1889, p. 2.

²¹⁰ Thames School of Mines, Assay Book 1887-1889, n.d. [May-June 1889], School of Mines Archives, Thames.

²¹¹ 'Tool used for grinding powders etc on slab': *Concise Oxford Dictionary*, 5 ed. (Oxford, 1964) p. 792.

was put back into the pan along with some pounds of salt in the hope that prolonged working might set the iron grindings free again, but no benefit resulted from this course. The tailings from these two pans, the 3rd & 4th, contained 16dwt 15 grains of gold and 2oz 0dwt 8 grains of silver, and 1oz 0dwt 4 grains of gold and 2oz 10dwt 10gr of silver, per ton, respectively. Into the 5th pan charge no iron amalgam was put but only clean quicksilver and this pan was worked hot, but without any improvement in the tailings, which contained 1oz 2dwt 16 grains of Gold and 1oz 7dwt 17gr of Silver per ton. The mean of all the assays of the tailings from the pan showed an average value of 18dwt 15 grains of Gold and 1oz 17dwt 7 grains of Silver per ton.

This is a very unsatisfactory result, but one thing is evident from it, namely that cold amalgamation without chemicals gave a slightly²¹² better result than hot amalgamation, or hot amalgamation with sulphate of copper and salt. Furthermore the tailings kept at very much the same value all the time, so that the iron amalgam present in the 2nd 3rd & 4th pans had no detrimental effect, though doing no good.

As you were anxious to try what ordinary berdan grinding would do with the pan tailings I ran about three fourths of them, including all the heavier portion, through the berdan keeping only a small overflow of water and a small charge in the berdan. The quicksilver on retorting yielded only 2dwt 9 grains of Bullion worth £1.10.8 1/2 per oz. The remaining portion of the tailings had been twice ground in the pan, having been put back into it from the settler, and seeing the poor work done by the berdan, I did not think it worth while to trouble running these through it.

The "iron amalgam" formed proved very troublesome. As an experiment, it was retorted and then amalgamated over again in the Berdan, without any overflow. Clean amalgam was thus obtained, and if grinding this retorted iron amalgam with quicksilver would extract the bullion from it, no very great trouble would result from its occasional formation. But on assaying the black slime baled out of the berdan after amalgamating for a time, it was found to contain about 7dwt of Bullion to the pound! A peculiar feature about this startling result was that while the bullion extracted by the berdan was worth only 16/10d per oz, that got by assay of the residue was worth £1"18"7d per ounce. The gold thus appears to have adhered to the base metal more than the silver. I dissolved the black slime in sulphuric acid and melted the residue, obtaining from it 9dwt 4 grains of gold and 10dwt 8 grains of silver.

While the quartz was being passed through the battery a sample was taken every ten minutes of the tailings as they came from the plates. The headings left in the stamper box were ground in the

²¹² 'Slightly' was added as an afterthought.

berdan and amalgamated, and the tailings from these were assayed separately. The assay of these tailings together with the assay of the general tailings and the bullion from the stamper box, plates, and berdans, gives the total assay value of the parcel – thus –

From Stamper Box, Plates, & headings ground in berdan we got
Gold 1oz 9dwt 21gr & Silver 0oz 18dwt 18gr per ton
Assay of all Tailings ” 1”16”12 ” 3”11”14 ” ”
Total Bulk Assay = Gold 3oz 6dwt 9gr & Silver 4”10”8” per ton

Montgomery provided details of the assays of tailings and headings and the return from plates, pan, ‘Tailings by Berdan’, and ‘iron amalgam’; the gold obtained was 2oz 17dwt 22 1/2gr and the silver was 3oz 16dwt 14 1/2gr. ‘Calculating these results to the ton of 2240lb’, the total for gold was 2oz 5dwt 1gr and for silver 2oz 19dwt 14gr.

This is equivalent to a saving of 68 per cent of the Gold and 66 per cent of the Silver originally present in the ore.

It is therefore clear that neither from amalgamation nor berdan treatment is sufficient to extract all the metallic contents of this ore. Whether roasting the ore before treatment would improve the result is doubtful, but is a matter for experiment. It seems to me that your ore like several others in the Ohinemuri district contains such very finely divided gold that amalgamation fails with it beyond a certain point, Some wet process, such as chlorination, seems to me to be quite indispensable if this very fine gold is to be saved successfully.

In milling this Werahiko ore there was no loss of quicksilver, notwithstanding the formation of base amalgam. We regained all the mercury used.²¹³

Alfred Price, senior partner A. & G. Price, engineers, of Thames,²¹⁴ and a leading mining investor,²¹⁵ had become a shareholder. In early July,

²¹³ Alexander Montgomery to Hugh McLiver, ‘Report on Battery test made for Mr Hugh McLiver May 28th 1889’, 1 July 1889, Thames School of Mines, Assay Book 1887-1889, School of Mines Archives, Thames; a summary of this report was included in H.A. Gordon to Minister of Mines, 1 June 1890, *AJHR*, 1890, C-3, p. 8.

²¹⁴ See *Cyclopedia of New Zealand*, vol. 2, p. 863; *Thames Star*, 23 February 1900, p. 2; *Observer*, 13 June 1903, p. 5, 16 February 1907, p. 4, 9 March 1907, p. 5; *Ohinemuri Gazette*, 6 March 1907, p. 3; *Auckland Weekly News*, 7 March 1907, p. 23.

Clark contacted him about a proposed ‘course of action’, details of which have been lost. His accountant was ‘certain’ that Price would support Clark’s plans when he returned from ‘up Country’.²¹⁶ Upon his return, Price told Clark he had read his letter to William Burton, a Thames publican who was another shareholder.²¹⁷ ‘He is quite willing to act in any way for the Benefit of the Shareholders as a whole – I am with you in whatever you consider best for our Benefit, and will assist your measures²¹⁸ against any obstinate action of Shareholders’.²¹⁹ Three days later, Price sent £2 14s to McLiver, the syndicate’s secretary, to pay a call,²²⁰ to enable work to restart. A Waiorongomai correspondent reported, 11 days later, that work would ‘at once’ be resumed with ‘eight or nine miners’. As some local shareholders opposed restarting mining, an attempt would be made to ‘frustrate the action of the Auckland shareholders’ who wanted the men employed.²²¹ It seems clear that after receiving Montgomery’s report local shareholders had lost faith in the ore. Instead of work resuming, the partnership was dissolved and the claim sold.²²² The sale was delayed because not all shareholders authorized it, but in early September Mitchelson bought the ground for £250.²²³

Mitchelson let the mine on tribute to John Hawkins, who in late March 1890 sent one ton to Thames for testing, obtaining over 10oz worth over £3 an ounce. ‘This was of course picked stone, the result of several months

²¹⁵ For example, *New Zealand Gazette*, 10 February 1876, p. 123, 23 March 1876, p. 220, 30 March 1876, p. 226, 4 May 1876, p. 320, 31 August 1876, p. 616, 2 November 1876, p. 753.

²¹⁶ John Watson to J.M. Clark, 5 July 1889, Letterbook 1888-1889, p. 622, A. & G. Price Archives, Thames.

²¹⁷ See paper on Henry Hopper Adams.

²¹⁸ ‘Measures’ is uncertain, being partly obliterated.

²¹⁹ Alfred Price to J.M. Clark, 13 July 1889, Letterbook 1888-1889, p. 635, A. & G. Price Archives, Thames.

²²⁰ Alfred Price to Hugh McLiver, 16 July 1889, Letterbook 1888-1889, p. 637, A. & G. Price Archives, Thames.

²²¹ Waiorongomai Correspondent, *Te Aroha News*, 27 July 1889, p. 2.

²²² *Te Aroha News*, 24 August 1889, p. 2.

²²³ *Te Aroha News*, 31 August 1889, p. 2, 11 September 1889, p. 2; Te Aroha Warden’s Court, Transfer by H.H. Adams and J.M. Clark to Richard Mitchelson, 28 November 1889, Certified Instruments 1889, BBAV 11581/10a, ANZ-A.

labour'.²²⁴ By the following month, Hawkins and his mate had crushed five tons for a return of 12oz 7dwt.²²⁵ Hawkins' prospecting resulted in the discovery of a reef, which was named after him.²²⁶ Only one tributer, presumably Hawkins, was working in the following year; in the 12 months to 31 March 1891 he obtained 29oz 1dwt from 45 tons.²²⁷ In the following 12 months, two tributers broke out 22 tons for a return of 12oz 17dwt.²²⁸

In May 1894, Hawkins' party sent some ore to the battery and two months later crushed 'a parcel of 11 trucks for 12dwt per truck; the return is small, but the party are able to make wages'.²²⁹ Three months later, he died from 'heart and lung troubles', aged only 48, leaving a young family.²³⁰ During the 12 months to mid-1895, one tributer had 16 tons crushed for 9oz 18dwt.²³¹ In March that year, the owners, by then Adams, Clark, and Mitchelson and his sister-in-law Sarah, wife of Richard Mitchelson, were sued by James Mills, a carpenter,²³² for forfeiture on the grounds of undermanning and not paying rent.²³³ The plaint was successful, and in June Mills was granted the mine, which became the main portion of the Cadman Prospecting Association's ground.²³⁴

THE CADMAN

²²⁴ *Te Aroha News*, 26 March 1890, p. 2.

²²⁵ H.W. Northcroft (Warden) to Under-Secretary, Mines Department, 26 April 1890, *AJHR*, 1890, C-3, p. 149.

²²⁶ *Te Aroha News*, 3 August 1895, p. 2; *Auckland Weekly News*, 29 August 1896, p. 19.

²²⁷ H.A. Gordon to Minister of Mines, 8 June 1891, *AJHR*, 1891, C-4, p. 43.

²²⁸ H.A. Gordon to Minister of Mines, 28 July 1892, *AJHR*, 1892, C-3, p. 48; George Wilson to Under-Secretary, Mines Department, 14 May 1892, *AJHR*, 1892, C-3A, p. 15.

²²⁹ *Thames Advertiser*, 21 May 1894, p. 2, 2 August 1894, p. 2.

²³⁰ Death Certificate of John Hawkins, 3 November 1894, 1894/799, BDM; *Thames Advertiser*, 5 November 1894, p. 2; Te Aroha Correspondent, *Auckland Weekly News*, 17 November 1894, p. 23. For details of his family, see section on Lucy Harriet Roffey in the paper on private lives in the Te Aroha district.

²³¹ H.A. Gordon to Minister of Mines, 24 July 1895, *AJHR*, 1895, C-3, p. 57.

²³² See paper on his life.

²³³ Te Aroha Warden's Court, Plaints 1895, 14/1895, BBAV 11572/2a, ANZ-A.

²³⁴ Te Aroha Warden's Court, *Thames Advertiser*, 1 July 1895, p. 3; *Te Aroha News*, 6 July 1895, p. 2.

The Cadman Prospecting Association was formed at an 'enthusiastic meeting' in Te Aroha in mid-February 1895 chaired by Mills. It had 25 members, 'but treble that number could have been obtained, in fact a number of persons were disappointed in being too late in applying for shares'. Initially, it would prospect near Diamond Gully.²³⁵ At the end of June, members met again:

There was a full attendance. Mr James Mills occupied the chair. Mr Mills reported that the application on behalf of the Association for the forfeiture of the Werahiko licensed holding had been granted by the Warden. At the next sitting of the Court a further application would be made for the forfeited holding on behalf of the Association.²³⁶ He also reported that the prospectors of the Association had pegged out the Werahiko, Silver King, Success, Waitoki, and a portion of the Success Extended ground, amounting in all to an area of 30 acres. It was agreed to put two men on the Werahiko ground to take out a crushing of ten trucks of ore in order to further test the claim. The reef is about 20 feet wide, and the stone already got out should, to all appearance, be good payable ore.²³⁷

This area, stretching from the former Waitoki to the north of Butler's Spur, contained almost all the Silver King lode.²³⁸ In the Werahiko low level, a new leader, nine inches wide, promised rich gold. When the works committee inspected the ground, they ordered the cleaning up of the old workings and taking out ten tons from the intermediate level for a trial crushing.²³⁹ Almost immediately, news of efforts to sell the ground to 'European capitalists' resulted in promoter's shares changing hands at £30 and £40.²⁴⁰

In early July, the *Te Aroha News* examined the prospects:

This Association have pegged out a considerable area ... containing some 30 acres, comprising several old workings, which

²³⁵ *Te Aroha News*, 20 February 1895, p. 2.

²³⁶ See Te Aroha Warden's Court, Mining Applications 1895, 20/1895, BBAV 11289/14a, ANZ-A.

²³⁷ Te Aroha Correspondent, *Auckland Weekly News*, 6 July 1895, p. 19.

²³⁸ Plan of Water Right, Aroha Gold Mines Ltd, October 1896, Museum Archives, Te Aroha.

²³⁹ *Te Aroha News*, 6 July 1895, p. 2.

²⁴⁰ *Te Aroha News*, 3 August 1895, p. 2, 21 August 1895, p. 2, 28 August 1895, p. 2, 31 August 1895, p. 2.

have been abandoned for many years. The principal portion being that known as the Werahiko. In this mine a large amount of work was done in the early days of the field; the main reef is about eight to ten feet wide at the outcrop and looks remarkably good stone, and will yield fair dish prospects. This reef has been driven on at three levels at considerable length, the intermediate tunnel being 228ft long. At the end of this drive a small leader was cut and stoped out, which yielded about 4oz gold per ton. In the low level the prospectors have discovered another small leader about 9in wide, which looks well and widens as it goes down, and should contain rich gold.²⁴¹

The works committee was 'greatly pleased with the prospects':

On the lower level, which is some 300 feet long, and enters through the old Waitoki ground, everything was found intact and ready for the tram rails to be laid down by which it is proposed to bring the stone to the hopper, and thence to the trucks. The tramway goes right on to the property. In the intermediate level (230 feet in) everything was found ready for breaking out the first crushing, which will be taken from the main reef, and should prove the value of the mine. Good dish prospects were got from every portion of the outcrop, which had been stripped, and disclosed a fine body of quartz about 18 feet in width. Very little outlay will be required to put the mine in first-rate working order. The upper level (200 feet in) was visited, and contains three reefs ranging from four to six feet in width, each giving indications of gold. This level will evidently pay well for working, but it is only intended to work the intermediate level at present, as there is such a quantity of quartz ready to be broken out. The members of the Association seem very sanguine of success.²⁴²

At the beginning of August, 'a large representative meeting of shareholders' discussed 'considerable routine business'.

The prospectors reported having cleaned up the intermediate level and that the small reef out of which a stope has been taken shows good gold, also that they have discovered the reef known as Hawkins' reef which is about 3ft wide and carrying coarse gold. It was decided to take out a few tons as a trial crushing.²⁴³

²⁴¹ *Te Aroha News*, 7 July 1895, p. 2.

²⁴² Te Aroha Correspondent, *New Zealand Herald*, 11 July 1895, p. 6.

²⁴³ *Te Aroha News*, 3 August 1895, p. 2.

Mining was 'going on briskly, and the stuff taken out shows gold freely'.²⁴⁴ A new reef promised 'to be very remunerative'.²⁴⁵ Late that month, good gold was found in Hawkins' reef, and the lodes in the upper levels were about to be opened up.²⁴⁶ One month later, eight assays taken from different portions of Hawkins' reef produced from £5 to £35 per ton; 'considering the large number of reefs on this property the assays are regarded as very satisfactory'.²⁴⁷ Three months later, this reef was still being driven on, with (the usual) 'encouraging prospects'.²⁴⁸

In July, 'several of Te Aroha's speculative spirits' pegged out the Seddon, 50 acres adjoining the Cadman on its lower, or eastern, boundary.²⁴⁹ Three months later, Mills obtained the Seddon,²⁵⁰ and attempted to float it in England along with the Cadman.²⁵¹ By early February 1896 negotiations were reportedly 'in a very forward state, and notification by cable of the successful completion may arrive any day. The terms are extremely favourable to the vendors, and as the majority of the shares are held locally, the result will be that a large amount of money will be distributed in the district'.²⁵² In late May, the Anglo-Continental Gold Syndicate, backed by both English and German capital,²⁵³ obtained an option over the Cadman and Seddon claims and their battery and machine sites.²⁵⁴ A correspondent provided details of the arrangement:

One month is allowed for a thorough examination of the property on the part of the intending purchasers, and four months is given for the purpose of opening up and testing. £1000 is to be deposited at the end of five months, which deposit will be forfeited in case of non-flotation, two months being allowed for floating. Everything

²⁴⁴ *Te Aroha News*, 14 August 1895, p. 2.

²⁴⁵ *Te Aroha News*, 21 August 1895, p. 2.

²⁴⁶ *Te Aroha News*, 28 August 1895, p. 2.

²⁴⁷ *Te Aroha News*, 25 September 1895, p. 2.

²⁴⁸ *Te Aroha News*, 7 December 1895, p. 2.

²⁴⁹ *Te Aroha News*, 24 July 1895, p. 2.

²⁵⁰ Te Aroha Warden's Court, Mining Applications 1895, 22/1895, BBAV 11289/14a, ANZ-A.

²⁵¹ For details, see paper on James Mills.

²⁵² *New Zealand Herald*, 12 February 1896, p. 6.

²⁵³ *Ohinemuri Gazette*, 30 May 1896, p. 5.

²⁵⁴ *New Zealand Herald*, 20 May 1896, p. 6; *Ohinemuri Gazette*, 23 May 1896, p. 2, 27 May 1896, p. 2.

being favourable up to this point, the property is then absolutely taken over on the basis of £10,000 cash, and 20,000 paid-up shares in a company of 150,000 shares with a working capital of £15,000. It is quite possible, however, that the Anglo-Continental people will complete the transaction before the expiry of the time allowed. The fact that they have a great number of properties under offer renders it necessary that they should secure to themselves ample time in which to deal with them.²⁵⁵

Permission was sought to work the Cadman for four months with two (instead of ten) men whilst negotiations continued; the ground would be worked with a reduced staff for nearly two years.²⁵⁶ According to an optimistic mining reporter, as the ground had 'a good record, there is little doubt that the transaction will be speedily completed'.²⁵⁷ This did not happen, and soon the ground was offered to the New Zealand Exploration Company.²⁵⁸ The inspecting engineer of the Mines Department considered that its situation made it 'probable' that this company would acquire it,²⁵⁹ but this did not happen.

By mid-1896, the old Werahiko levels had been 'cleaned out, and the Big Reef' in the Seddon had been 'prospected on the surface'.²⁶⁰ In late 1896, the Cadman syndicate, once more in charge of the ground, was 'working on a fine run of gold in the Hawkins' reef', and a trial crushing was to be made at Thames.²⁶¹ The result was not published. The following February, 'a wonderful find' was made in the Cadman, 'a striking feature' being its 'proximity' to the tramway.²⁶² Assays of this new reef gave from five to six ounces to the ton.²⁶³ Late that month, a report probably about the same reef stated that 'an important find has been made on the Waitoki Reef.... Sixty

²⁵⁵ Te Aroha Correspondent, *Auckland Weekly News*, 30 May 1896, p. 9.

²⁵⁶ Te Aroha Warden's Court, Register of Applications 1883-1900, 38, 39/1896; 46, 80, 133/1897; 11/1899, BBAV 11505/1a; Letterbook 1883-1900, pp. 461, 463, BBAV 11534/1a; Mining Applications 1898, 27/1898; Mining Applications 1899, 11/1899, BBAV 11289/15a, ANZ-A.

²⁵⁷ *New Zealand Herald*, 20 May 1896, p. 6.

²⁵⁸ See paper on this company.

²⁵⁹ H.A. Gordon to Minister of Mines, 17 June 1896, *AJHR*, 1896, C-3, p. 79.

²⁶⁰ H.A. Gordon to Minister of Mines, 17 June 1896, *AJHR*, 1896, C-3, p. 79.

²⁶¹ *Auckland Weekly News*, 29 August 1896, p. 19.

²⁶² *Auckland Star*, 9 February 1897, p. 2.

²⁶³ *Ohinemuri Gazette*, 10 February 1897, p. 2.

pounds of specimens, showing course gold freely, were brought down the other day, and the mine is expected to be a dividend payer in the immediate future'.²⁶⁴ At the beginning of March, when two representatives of overseas financial corporations inspected the Cadman, they appeared satisfied with the permanency of the reefs.²⁶⁵ A 'special mining reporter' provided details of the outcome:

After a long period of waiting, during which hope sprang eternal in every shareholder's breast, in spite of the many disappointments experienced, there seems a reasonable prospect of one of our best known local mining properties being taken in hand by foreign capitalists. We refer to the option which has been taken of the "Cadman" holding, situated at Waiorongomai. Strictly speaking, the property consists of two pieces of ground, viz, the Cadman Licensed Holding (about 30 acres) which was acquired originally, and the "Seddon" S.C. (about 90 acres), which was acquired subsequently. The combined claims immediately adjoin the boundary of the property of the Aroha Gold Mines, Limited. For some time past negotiations for the sale of the property have been in progress with the London and New Zealand Finance Corporation, Limited, and on Saturday night Mr [Albert] Spencer Ellam, Attorney for the Company [and its engineer in chief],²⁶⁶ finally concluded arrangements with the shareholders' executive whereby an option has been taken up. The terms are as follows: - The sum of £300 cash to be paid for an option of six months; during this term the intending purchasers to develop the property and test it thoroughly, manning the ground with at least the number of men required by the Warden. At the expiry of the six months, if the company is satisfied with the result of their work a further sum of £2700 cash (making £3000 in all) is to be paid to the owners with a further consideration of 20,000 shares fully paid up to £1 in a company of £150,000²⁶⁷ or in proportion thereto. According to the deed of option, the purchasers are to have three months after expiry of option in which to allot the shares, and in the event of their not completing the sale, all quartz obtained will be handed over to the owners less working expenses. In that case also, the deposit will be forfeited. The £300 deposit has now been lodged at the bank to the credit of the vendors.

²⁶⁴ *New Zealand Mining Standard*, 27 February 1897, p. 5.

²⁶⁵ *Ohinemuri Gazette*, 3 March 1897, p. 3.

²⁶⁶ See *New Zealand Herald*, 11 December 1896, p. 6; *Auckland Star*, advertisement, 15 December 1896, p. 8, Kuaotunu Correspondent, 12 January 1897, p. 2, 13 May 1897, p. 7.

²⁶⁷ £150,090 in original, presumably a printer's error.

It is intended to proceed vigorously with operations, which, for a time at least, will be under the supervision of Mr [T.] M. Barney, an Engineer of great experience and ability [and the representative of the London and New Zealand Finance Corporation].²⁶⁸ In all probability three shifts of men will be put on, and the principal work at present undertaken will be the putting in of a tunnel on the tramway level, which will be driven with a view to intersecting the various reefs.

Mr Lindsay Jackson is at present engaged making a mining survey of the property. The claim is one which undoubtedly has “a past,” (and we sincerely hope it has “a future.”) It was known in the early days as the “Werahiko,” and some very rich stone was taken from it. For some time past it has been under partial protection, and during the time the men have been working, some 60 to 80lb of very rich specimens showing gold freely, have been obtained, and 10lb of the stone has been secured by the Company with a view to its exhibition in their London office.

Naturally, the news of the option being taken up, was received with great satisfaction by the shareholders, the bulk of whom are local residents.²⁶⁹

(Albert Spencer Ellam, formerly a pioneer of Western Australian mining who was the company’s engineer-in-charge in Auckland,²⁷⁰ had recommended that the option be acquired.²⁷¹ Lindsay Jackson,²⁷² a surveyor who had participated in the Te Aroha rush,²⁷³ prepared working plans, but had to sue in August to obtain payment.)²⁷⁴ A Thames newspaper commented that ‘as this is a good property it will doubtless give satisfaction’.²⁷⁵ Henry Brennan Kerr, a local miner,²⁷⁶ who had taken an

²⁶⁸ *Ohinemuri Gazette*, 20 March 1897, p. 4.

²⁶⁹ Special Mining Reporter, *Ohinemuri Gazette*, 10 March 1897, p. 2.

²⁷⁰ See *Western Australian Directory, 1897*, p. 437; *Southland Times*, 25 January 1897, p. 2; David F. Branigan, ‘The Geological Society on the Other Side of the World’, in *The Making of the Geological Society of London*, ed. Cherry Lewis and Simon J. Knell (London, 2009), p. 353.

²⁷¹ *Auckland Weekly News*, 24 July 1897, p. 21.

²⁷² See *Waikato Times*, 10 April 1888, p. 2; *Thames Advertiser*, 11 February 1895, p. 2; *Ohinemuri Gazette*, 28 July 1897, p. 4.

²⁷³ Te Aroha Warden’s Court, Miner’s Right no. 953, issued 25 November 1880, Miners’ Rights Butt-Book 1880, BBAV 11533/1b; Register of Te Aroha Claims 1880-1888, folios 173, 181, BBAV 11567/1a, ANZ-A; *New Zealand Gazette*, 24 February 1881, p. 258.

²⁷⁴ *Ohinemuri Gazette*, 11 August 1897, p. 2.

²⁷⁵ *Thames Advertiser*, 10 March 1897, p. 3.

active part in negotiating the option, was appointed sub-manager of development under Barney's supervision.²⁷⁷ Another report stated that the work would be supervised by Ellam and that the new low level would tap all the upper workings and further prospect the ground, at an estimated cost, including testing, of from £3,000 to £4,000.²⁷⁸ Later in March, the first dividend, of £6 per share, was paid. Expecting to sell their property when the option expired, shareholders retained their shares.²⁷⁹ The *Te Aroha News*' prediction 'that the brave little community of Waiorongomai' was 'on the eve of experiencing a change from the monotony of undeserved neglect' was chiefly based on its faith in the Cadman, 'which is valuable both from its present *status* and prospects, and by repute as an old-time gold-producer'.²⁸⁰

In May, 'excellent progress' was being made under the direction of another mining engineer, Quentin A. McConnell.²⁸¹ Working three shifts, the low level was being driven 24 hours a day.²⁸² By the end of the month, results were reportedly 'satisfactory'.²⁸³ In mid-July, the local newspaper was enthusiastic:

Development work is being pushed rapidly ahead. The tunnel the option-holders are driving is intended to crosscut several of the famous lodes traversing this claim, and there is not the slightest doubt that the ultimate results of the investments now being pursued will be of a favourable character.²⁸⁴

²⁷⁶ See Marriage Certificate of Henry Brennan Kerr, 25 June 1897, 1897/4685, BDM; Te Aroha Rifles, Nominal Roll to 28 February 1900, Army Department, ARM 41, 1911/66v, ANZ-W.

²⁷⁷ *Ohinemuri Gazette*, 20 March 1897, p. 4.

²⁷⁸ *Thames Advertiser*, 11 March 1897, p. 3.

²⁷⁹ *Thames Advertiser*, 23 March 1897, p. 2.

²⁸⁰ *Thames Star*, 16 March 1897, p. 2.

²⁸¹ See *Southland Times*, 25 January 1897, p. 2, 3 February 1897, p. 2, letter from 'Quartz', 23 February 1897, p. 3; Te Aroha Correspondent, *New Zealand Herald*, 9 March 1897, p. 6; *Ohinemuri Gazette*, 20 March 1897, p. 4.

²⁸² 'Werahiko', 'Te Aroha Letter', *New Zealand Mining Standard and Financial News*, 6 May 1897, p. 3; see also *Thames Advertiser*, 1 May 1897, p. 4; *Ohinemuri Gazette*, 5 May 1897, p. 2.

²⁸³ *Waikato Argus*, 29 May 1897, p. 3.

²⁸⁴ *Te Aroha News*, n.d., cited in *Thames Advertiser*, 14 July 1897, p. 3.

Late in the month, McConnell requested that the option, about to expire, be extended; it was agreed to extend it until Christmas.²⁸⁵ The reason for the extension was because of the ‘indefiniteness of the results attending the development work up to date with regard to the lodes living down’.²⁸⁶ After four months’ work under McConnell’s direction, prospects were less optimistic:

It appears from the work already done that the gold taken from the properties has been found in chutes and pockets, and the previous workers have “picked the eyes” out of them. Mr McConnell is running a low level tunnel to under the reefs at depth, and should the reefs, or gold-bearing chutes, go down, there is no doubt he will recommend the purchase of the property to his company and active operations will be carried out. This will mean the giving of a considerable impetus to mining in the district. The bugbear appears to have been the treatment of the ore, but very exhaustive experiments made by Mr McConnell during the option has left him satisfied that the cost of treatment will not be so excessive as to make the successful treatment of the ore prohibitory. Although the assays taken from the present workings are comparatively small in amount, this is explained by the rich gold in the chutes and pockets having, as previously stated, been taken out in the past. Some of the assays where the picking of the eyes had not been so complete went as high as £10 to the ton, but the average values goes about £1 a ton. The cost of mining and treatment Mr McConnell estimates as not to exceed £1 a ton. Of the two low level tunnels one is now in 268 feet, and by driving a further distance of 83 feet the junction of two reefs is expected to be intersected. Good indications are given in the surface and upper workings. But as the country is now very hard, progress is both slow and expensive. The No. 2 tunnel, which is in 306 feet, has already cut a small reef, which is believed to be a parallel reef to the Werahiko, which, it is expected, will be cut in a few more feet of driving, when 200 feet of backs will be obtained. A HERALD representative has seen some of the stone from this tunnel which has just arrived from the mine, although very kindly looking and is free milling, it gives but little gold by assay or panning. It is, however, sufficiently encouraging to the engineer to continue the progress of the work. This really will prove the whole, for, as mentioned above, the whole of the work in the district in the past seems to have been confined nearly entirely to surface work and following narrow and uncertain chutes of gold, which have remained unproven as to their

²⁸⁵ *Ohinemuri Gazette*, 31 July 1897, p. 5.

²⁸⁶ *Thames Advertiser*, 30 July 1897, p. 3.

continuity at depth. These low level tunnels will prove whether the veins do continue to yield at depth.... Mr McConnell ... is anxious to spare no effort to prove the property of sufficient value to be taken up by his company.²⁸⁷

According to a plan drawn in the early 1930s, the Cadman No. 2 level was driven from just above the tramway, at an elevation of 1,124 feet; the No. 1 low level was below it, at 1,005 feet. The Seddon level, driven towards the Silver King lode in 1909, was to the left of No. 1, at 970 feet.²⁸⁸ The loss of the local newspaper for 1897 means details of the work cannot be traced, but personal inspection of the ground revealed that No. 1 level reached a reef, presumably the Silver King, which was driven on in both directions for short distances, the ore being sent up to the tramway by an aerial ropeway.

In late August, a director inspected the work.²⁸⁹ A reef cut in the Cadman low level at that time produced 'nice looking specimens'.²⁹⁰ Despite this encouragement, the company abandoned its option and shut down the mine, no doubt on the recommendation of its director, throwing 'a considerable number of men out of work'.²⁹¹ Local investors then took control of the ground once more. At the beginning of October, Mills applied for the Cadman Special Claim, comprising 78 acres of the Cadman and Seddon, unrealistically promising to spend £5,000 on development.²⁹² Existing licenses were surrendered to enable the ground to be granted as one title.²⁹³ The new owners continued driving the low level 'to prove the ground at a greater depth, and to strike the main lode'. By mid-October, 99 feet had been driven, 49 of them in the preceding month.²⁹⁴

²⁸⁷ *New Zealand Herald*, 19 July 1897, p. 6.

²⁸⁸ Waiorongomai Gold Mines Ltd, Plan of Waiorongomai Goldfield, n.d. [1930s], in private possession; for details of the Seddon workings, see *Te Aroha News*, Warden's Court, 29 July 1909, p. 2, 30 September 1909, p. 2, 7 October 1909, p. 3, 27 November 1909, p. 3.

²⁸⁹ *Thames Advertiser*, 28 August 1897, p. 3.

²⁹⁰ *Ohinemuri Gazette*, 4 September 1897, p. 4.

²⁹¹ *Thames Advertiser*, 9 October 1897, p. 2.

²⁹² Te Aroha Warden's Court, Application of James Mills, 4 October 1897, Mining Applications 1897, BBAV 11289/15a, ANZ-A.

²⁹³ *Te Aroha News*, 13 January 1898, p. 2.

²⁹⁴ *New Zealand Mines Record*, 16 October 1897, p. 103.

In January 1898, Joseph Campbell, a self-proclaimed saviour of the field,²⁹⁵ let a contract to drive a crosscut to the junction of the Silver King and other main lodes, planning to treat the ore at his own plant.²⁹⁶ The following month, he tested ten tons of Cadman ore.²⁹⁷ By mid-February, six men had driven the 'Silver King level' 240 feet 'along the lode'.²⁹⁸ By May, 278 feet had been driven, at a cost of £486, but the reef continued to be 'low grade'.²⁹⁹ In July, Mills informed Alfred Jerome Cadman, the Minister of Mines, that Campbell 'some time since' had 'made a thorough personal examination of the Silver King lode' in the claim named after him. Campbell had assured the 'Cadman Company' that 'the Whole' of the 30-foot-wide reef was 'worth £3-10-0 per ton'.³⁰⁰ Prospecting continued, and in January 1899 the syndicate convinced the council to repair the branch tramway.³⁰¹ Four months later, Mills abandoned the ground.³⁰²

In September 1900, the 'Cadman Syndicate' asked the council 'to forgive them their promised donation of £5 towards the cost of a new wire rope' for Butler's Incline. 'They had no funds and were likely to lose their property', as the only mine owner doing any mining of significance, Edwin Henry Hardy,³⁰³ 'had lodged a plaint for forfeiture'. They had arranged with Hardy 'to get 40 or 50 tons crushed at 9s per ton', but 'when they sent down a parcel of ten tons he declined to crush under 20s per ton', although willing to crush at the original price if a larger quantity was supplied.³⁰⁴ It was not, and this syndicate ceased work.

²⁹⁵ See paper on his life.

²⁹⁶ *Te Aroha News*, 1 February 1898, p. 2.

²⁹⁷ *Thames Advertiser*, 1 February 1898, p. 3.

²⁹⁸ *New Zealand Mines Record*, 16 February 1898, p. 299.

²⁹⁹ George Wilson to Minister of Mines, 12 May 1898, *AJHR*, 1898, C-3, p. 74.

³⁰⁰ James Mills to Minister of Mines, 25 July 1898, Mines Department, MD 1A, 8/50, Part 1, ANZ-W.

³⁰¹ Piako County Council, Letterbook 1897-1899, p. 408 (24 January 1899), Matamata-Piako District Council Archives, Te Aroha; Warden to Under-Secretary, Mines Department, 3 July 1899, *AJHR*, 1899, C-3, p. 70.

³⁰² Te Aroha Warden's Court, Register of Applications 1883-1900, 11/1899, BBAV 11505/1a; Mining Applications 1899, 11/1899, BBAV 11289/15a, ANZ-A.

³⁰³ See paper on his life.

³⁰⁴ Piako County Council, *Waikato Argus*, 26 September 1900, p. 4.

In August 1901, Gavin was granted the Cadman, 'which at one time had a good name'.³⁰⁵ During the following year, he worked it along with the adjoining (on the uphill side) Sceptre with fewer men than required because he was having ore from a newly discovered lode treated by a new process in London and was negotiating to raise foreign capital.³⁰⁶ Two men were doing 'a little prospecting'.³⁰⁷ In May 1902, he sold 12oz 15dwt of melted gold.³⁰⁸ The following year, these men principally drove and stoped on the main reef from the tunnel at the tramway level, extracting 114 tons for a return of 70oz, worth £202 8s.³⁰⁹ Work continued 'with fair results' while Gavin attempted, and failed, to form a company.³¹⁰

In 1904, Hardy was driving on a 'large lode' in the Sceptre Extended, close to the Silver King workings.³¹¹ Visitors 'found work going on in a drive where the reef is shortly to be worked on, a little ore being taken out in the meantime'.³¹² During that and the following year, Hardy assayed samples. Two from the Gold King reef in the Cadman were taken from the paddock, the first returning 10dwt 14gr gold and 5oz 11dwt 7gr silver and the second 1dwt 15gr of gold and 7oz 4dwt 12gr silver. The lowest result from four taken in the 'long drive' gave only a 'trace' of gold; the best had 11dwt 10gr. Of the 16 taken from the Silver King lode in this claim, only four gave any ounces of gold to the ton: 1oz 2dwt 6gr from 'Honey Comb', 10z 1dwt 5gr from 'Top Hole', 4oz 4dwt 2gr from 'Lowest Part Blow R.', and 8oz 11dwt 12gr 'Banded quartz'. The highest amount of silver, 47oz 7dwt 8gr, was in the 'Honey Comb', and none at all was found in 'Lowest Part Blow R'. The

³⁰⁵ *Thames Star*, 2 August 1901, p. 2.

³⁰⁶ Te Aroha Warden's Court, Mining Applications 1901, 75/1901, BBAV 11289/16a; Mining Applications 1902, 1, 23, 24/1902, BBAV 11289/17a, ANZ-A.

³⁰⁷ James Coutts (Mining Inspector) to Under-Secretary, Mines Department, 13 March 1902, *AJHR*, 1902, C-3, p. 42; Warden to Under-Secretary, Mines Department, 1 March 1902, *AJHR*, 1902, C-3, p. 33.

³⁰⁸ Bank of New Zealand, Thames Branch, Gold Purchase Register 1899-1932, entry for 31 May 1902, Bank of New Zealand Archives, Wellington.

³⁰⁹ James Coutts to Under-Secretary, Mines Department, 21 March 1903, *AJHR*, 1903, C-3, p. 89.

³¹⁰ Te Aroha Warden's Court, Mining Applications 1904, 33, 41/1904, BBAV 11289/18a, ANZ-A; James Coutts to Under-Secretary, Mines Department, 18 February 1905, *AJHR*, 1905, C-3, p. 36.

³¹¹ *Auckland Weekly News*, 20 October 1904, p. 40.

³¹² *Auckland Weekly News*, 27 October 1904, p. 33.

only other tests from this claim were one each in the main drive, 'Black specks', and a leader.³¹³ Ten samples came from the Gold King reef in the Waitoki returned from two traces to 2oz 17dwt 3gr, and two from the same reef in the Werahiko gave almost identical amounts of gold, 19dwt 14gr and 19dwt 17gr.³¹⁴ Four samples from the Silver King lode in Hardy's Big Blow, which included Buck Rock, gave from 1dwt 15gr to 6dwt 12gr of gold.³¹⁵ As no assays revealed payable ore, Hardy ceased work on this claim.

In January 1905 Gavin and others formed the Cadman Company.³¹⁶ Gavin's 'small party' reportedly obtained 'fair results',³¹⁷ but in August, after driving ten feet on the two-foot Werahiko reef, the ore found to be 'of little value', whereas the six-foot Silver King reef contained 'nice looking ore, with a fair amount of sulphide and a little gold showing. The sample assays from the winze are valued at £17 13s 7d and £1 2s 8d. No value could be got by pounding or machinery in any of the samples, and the ordinary amalgamation treatment would be of no use for this ore'.³¹⁸ Accordingly, in this month they ceased work for want of funds.³¹⁹ At that time the main drive was being cleared out and re-timbered in readiness for driving on the Silver King reef.³²⁰ In 1906, Gavin once more obtained the Cadman and Sceptre, and, when seeking permission to work each for six months with two men while obtaining capital, he declared he was 'thoroughly prospecting' the Cadman.³²¹

THE BENDIGO

³¹³ 'Assays of Ore from Waiorongomai taken by E.H. Hardy 1904-1905', in Malcolm Hardy, 'Report for South Pacific Mines', 27 October 1955, Appendix, p. 1, Eric Coppard Papers, Waihi.

³¹⁴ 'Assays of Ore from Waiorongomai taken by E.H. Hardy 1904-1905', in Hardy, Appendix, p. 3, Eric Coppard Papers, Waihi.

³¹⁵ 'Assays of Ore from Waiorongomai taken by E.H. Hardy 1904-1905', in Hardy, Appendix, p. 5, Eric Coppard Papers, Waihi.

³¹⁶ For details of this undercapitalized company, see paper on companies and company financing in general and at Te Aroha in particular.

³¹⁷ Warden to Under-Secretary, Mines Department, 5 May 1905, *AJHR*, 1905, C-3, p. 86.

³¹⁸ *Thames Star*, 25 August 1905, p. 1.

³¹⁹ Company Files, BADZ 5181, box 132 no. 849, ANZ-A.

³²⁰ *Thames Star*, 2 September 1905, p. 1.

³²¹ Te Aroha Warden's Court, Mining Applications 1906, 2, 3, 24, 25/1906, BBAV 11289/18a, ANZ-A.

In 1911 it was recalled that what became known as the Bendigo mine was originally discovered by Hone Werahiko. 'On and off the reef has been worked, mostly on the surface, from the time of its discovery with varying success'.³²² In September 1907, when obtaining protection yet again while trying to form a company, Gavin stated that, as the ore was refractory, it was 'impossible to do more at present than prospecting and preparatory works'.³²³ The following July, although the ground was not being worked, he was granted another six months to prospect and test the reefs that became the property of the Bendigo Company later that year.³²⁴ He was appointed mine manager.³²⁵ In late September, the *Te Aroha News*, predictably optimistic, reported that since taking charge,

he has been very busy cleaning out and timbering the level leading into the Silver King reef. This reef has been opened up for a length of about 250ft and carries good values all the distance. Mr Gavin has several tons of ore broken out and paddocked, which is of a high grade ore and gold can be very freely got by dish and mortar test, there is also a quantity of sulphide ore where you cannot get the free gold by washing, but which assays anything from £12 to £50 per ton. It is the intention of this Company to break out about 20 to 30 loads of this ore and get it treated at [the] Waiorongomai battery or at some other place that might be more suited to the treatment of the ore.

Since Mr Gavin has had charge he has been testing this Reef on the outcrop in several places and finds that the Reef carries free gold for a length of over 1000ft on the outcrop. There are also several other reefs on the property and most of them carrying good values. Taking all things into consideration the Bendigo Mine will prove to be a valuable property.³²⁶

³²² *Te Aroha News*, 31 August 1911, p. 3.

³²³ Te Aroha Warden's Court, Mining Applications 1907, 27/1907, BBAV 11289/19a, ANZ-A.

³²⁴ Te Aroha Warden's Court, Plaints 1908, 3/1908, BBAV 11572/3a; Mining Applications 1908, 24/1908, BBAV 19a, ANZ-A; for details of the company, see paper on the Bendigo Battery.

³²⁵ Company Files, BADZ 5181, box 226 no. 1332, ANZ-A; *Te Aroha News*, 24 September 1908, p. 2.

³²⁶ *Te Aroha News*, 24 September 1908, p. 2.

Matthew Paul, the mining inspector, when visiting during the following month, noted that the property 'had unusual prospects, and was well spoken of'.³²⁷ 'A very large parcel' was broken out from the Silver King reef in November', but Gavin then moved his men to the Werahiko reef, 'about 500ft east of the Silver King reef' and about 12 feet wide and 'very similar to the latter. 'Colours of gold are seen distributed through the quartz when breaking down. Little has been done on this reef as yet'.³²⁸ In December, Gavin bagged five tons of ore for testing in Thames and was examining several reefs. He had driven about ten feet on the hanging wall side of the lode, 100 feet in from the Silver King reef, on a two-foot wide reef that 'prospects well'. He had also cut through the Werahiko reef where it was 18 feet wide and showing 'good sulphide ore' and free gold similar to the Silver King, and planned to drive south on it.³²⁹ Prospecting during the company's first nine months cost £873, most of its available funds.³³⁰

In January 1909, an eight-foot reef containing good sulphide ore was found on the western portion of the property.³³¹ Two months later, an unspecified amount from an unspecified part returned 14oz of melted gold.³³² Paul reported that mining was 'principally confined to the Silver King reef, which is 8ft in width. The footwall portion assays £3 19s 1d per ton, and the manager considers the prospects are encouraging'.³³³ In late June, Manuel 'personally broke down some quartz from the reef, which showed free gold'.³³⁴ By then, the reef had 'greatly improved in value', becoming 'a solid body of ore, about 10ft wide', with gold 'plainly seen in the stone'. There were 'fully 200 tons stacked ready for treatment. A rib of quartz, about 3ft wide, has been discovered', heading 'right into a large body of ore over 20ft in width, known as the Moa reef'.³³⁵ One assay 'went as high as £60', and when the cross reef junctioned with the 30-foot-wide Moa lode

³²⁷ *Te Aroha News*, 24 October 1908, p. 2.

³²⁸ *Thames Star*, 27 November 1908, p. 1.

³²⁹ *Te Aroha News*, 12 December 1908, p. 3.

³³⁰ *AJHR*, 1909, C-3, p. 90.

³³¹ *Auckland Weekly News*, 28 January 1909, p. 49.

³³² Bank of New Zealand, Thames Branch, Gold Purchase Register 1899-1932, entry for 24 March 1909, Bank of New Zealand Archives, Wellington.

³³³ Matthew Paul (Inspector of Mines) to Under-Secretary, Mines Department, 27 March 1909, *AJHR*, 1909, C-3, p. 25.

³³⁴ *Thames Star*, 26 June 1909, p. 2.

³³⁵ *Thames Star*, 1 July 1909, p. 1.

Gavin hoped 'to get something good'.³³⁶ Shortly afterwards, when driving north the ore 'showed a great improvement, there being considerably more sulphide showing, with a very rich seam on the footwall'.³³⁷ The *Te Aroha News* 'expected that before long the noise of the stampers will be heard in the vicinity of the Bendigo Mine'.³³⁸ Long delays in constructing the battery frustrated this hope.³³⁹

The ore extracted as Gavin drove northwards was 'of high grade, more especially on the footwall side, where gold is showing amongst the mineral'.³⁴⁰ This rich band soon increased in size to two feet and was expected to become as wide as the drive. Gavin hoped that the directors would 'lose no time in getting the Battery erected, as we have such a large tonnage of ore awaiting treatment'.³⁴¹ Further driving struck rock 'full of small quartz veins', and at the southern end of the reef there was believed to be 'good payable ore'.³⁴² In October a 'leading stope' was commenced where the reef was nine feet wide.³⁴³ Two men worked in the 'leading stope', the face of which by January 1910 was within ten feet of the end of the drive. Although the ore looked good, it was full of sulphide. Other men were employed 'putting in studs along the level, so as to make ready for another stope'.³⁴⁴ Two months later, when the company invited tenders to drive 100 feet,³⁴⁵ two men were stoping out ore from the same reef, now 12 feet wide. The other miners were driving a new low level, which was in 60 feet in 'very good country'.³⁴⁶ Perhaps this low level was the one labelled 'Bendigo' on the Waiorongomai Company's plan of 1934: halfway between the old Cadman workings and the top of Butler's Incline, its portal was 1,124 feet above sea

³³⁶ *Thames Star*, 9 July 1909, p. 1.

³³⁷ *Te Aroha News*, 15 July 1909, p. 2.

³³⁸ *Te Aroha News*, 12 August 1909, p. 2.

³³⁹ See paper on the Bendigo Battery.

³⁴⁰ *Auckland Weekly News*, 2 September 1909, p. 36; *Te Aroha News*, 4 September 1909, p. 3.

³⁴¹ *Te Aroha News*, 9 September 1909, p. 2.

³⁴² *Thames Star*, 7 October 1909, p. 1, 15 November 1909, p. 1.

³⁴³ *Te Aroha News*, 7 October 1909, p. 3, 16 October 1909, p. 3, 20 November 1909, p. 3; *Thames Star*, 18 October 1909, p. 1.

³⁴⁴ *Auckland Weekly News*, 20 January 1910, p. 36; *Te Aroha News*, 22 January 1910, p. 3.

³⁴⁵ *Te Aroha Mail*, 17 March 1910, p. 2.

³⁴⁶ *Te Aroha News*, 19 March 1910, p. 2.

level, and the Silver King reef was driven on a short distance,³⁴⁷ which fits what can be seen today. However, in the following year the lowest level was described as starting ‘in from the hopper’ at the end of the tramway,³⁴⁸ meaning the old Cadman workings.

In his annual report, Paul stated that work had been ‘principally confined to surface prospecting on several reefs outcropping on this claim, with satisfactory results. Owing to lack of capital, the owners have been unable to fully develop these lodes’. Nevertheless, the drive on the Silver King had been extended by 100 feet ‘and a leading stope carried along’.³⁴⁹ By late April, whilst driving on this reef continued, the contractors in the low level had ‘driven another 26ft in good country, and should finish their contract next week’.³⁵⁰ Gavin announced in early June that this level, driven another 17 feet in the past week, was 80 feet long. ‘The country rock is lighter in colour, and full of minerals, with small quartz stringers’. Ore was still being stoped out of the Silver King reef.³⁵¹ At the beginning of July, contractors advanced the low level by 15 feet in one week ‘in a good class of country, and as there is a strong flow of water in the face the management expects to soon cut the reef’.³⁵² One week later, Gavin reported that the reef cut in the low level had similar ore to the top level. ‘From the amount of water coming from the reef, he is of opinion that the reef will be very large, and he hopes to be able to report its size and value shortly. The stopes on the upper level are still producing good payable ore’.³⁵³ By September, a ‘large’ amount of ore was paddocked awaiting the completion of the battery,³⁵⁴ and by the end of the year 2,000 tons had been broken out.³⁵⁵

³⁴⁷ Waiorongomai Gold Mining Company, Plan of Bendigo Mine, n.d. [?1934], in private possession.

³⁴⁸ *Te Aroha News*, 7 February 1911, p. 2; this report stated that it started ‘in from the hopper at the battery’, which is nonsense: from the tramway was clearly meant.

³⁴⁹ Matthew Paul to Under-Secretary, Mines Department, 31 March 1910, *AJHR*, 1910, C-3, p. 18.

³⁵⁰ *Te Aroha News*, 26 April 1910, p. 2.

³⁵¹ *Te Aroha News*, 11 June 1910, p. 2.

³⁵² *Te Aroha Mail*, 2 July 1910, reprinted in *Te Aroha News*, 10 July 1935, p. 5.

³⁵³ *Te Aroha News*, 9 July 1910, p. 2.

³⁵⁴ *Te Aroha Mail*, 10 September 1910, p. 2.

³⁵⁵ *Te Aroha Warden’s Court, Complaints 1911, 1/1911, BBAV 11527/3a, ANZ-A.*

In February 1911, a reporter described the mines situated alongside the track from Buck Rock:

Mounting still further up what is known as the upper horse track, one crosses what are called the Silver King lodes in the Sceptre Extended special claim held till recently by Hardy's Mines Ltd.³⁵⁶ This lode has had very little work done on it in this section of the field, but where opened up on this outcrop below the horse track by the manager of Hardy's Mines, has disclosed ore of a payable nature for a width of from six to ten feet. In fact, some of the ore broken out was very high grade indeed.

As one traverses the horse track still further to the north of the Sceptre Extended one is practically walking over a network of lodes until the Bendigo Goldmining Company's workings are reached. This Company are at present working on and developing the Silver King lode which at the present time and for some time past has been producing milling ore of good grade for a width of about ten feet. All ore from the different faces as development work proceeds is being stacked at the mouth of the workings in readiness for transport to the Company's reduction works which are in course of erection.³⁵⁷

What was being referred to was the old Cadman mine, as only 'after leaving the Bendigo workings' did walkers traverse the branch tramline.³⁵⁸ The following month, Paul reported an average of four miners working during the past 12 months, 'principally driving and getting ready for stoping on the Silver King lode', which still averaged eight feet in width. He estimated that 1,000 tons had been 'broken out and stacked at the mouth of the level' awaiting the completion of the aerial tramway from the bottom of Butler's Incline to the new battery.³⁵⁹ One month later, an extra miner was employed.³⁶⁰ In October, nearly two months after the battery opened, the mine was visited by 'several Auckland and Waihi mining men. A large amount of good looking ore is showing and the Bendigo should turn out an

³⁵⁶ See paper on this company.

³⁵⁷ 'The Waiorongomai Mining District', *Te Aroha News*, 7 February 1911, p. 2.

³⁵⁸ 'The Waiorongomai Mining Region', *Te Aroha News*, 9 February 1911, p. 2.

³⁵⁹ Matthew Paul to Under-Secretary, Mines Department, 31 March 1911, *AJHR*, 1911, C-3, p. 22.

³⁶⁰ *Te Aroha News*, 8 April 1911, p. 2.

important claim'.³⁶¹ However, when treated the ore failed to meet expenses.³⁶²

The geological survey of the district reported the outcome of the company's work (combining its output with that of its predecessors) to the end of 1911:

The Silver King is the principal lode in this company's claim. This averages about 8ft where it has been worked. Besides this lode, the East-and-West, Werahiko, and Waitoki lodes have been exploited to some extent. The East-and-West lode is very large, and the Waitoki and Werahiko are each about 3ft in thickness. As far as can be ascertained, these lodes have yielded up to the end of 1911 as follows:-

					Long Tons	Oz
Silver King	"	"	"	"	180	132
Werahiko	"	"	"	"	414	371
Waitoki	"	"	"	"	<u>123</u>	<u>36</u>
					717	539

The company opened up the Silver King lode on the Tram level, and completed a low level beneath it, but here the lode was poor.... Unfortunately, the mine could not be made to pay.³⁶³

The East and West lode, formerly the Moa, was further up the hillside from the Werahiko and Waitoki ones; it branched off the main reef to link with the Silver King reef.³⁶⁴ In November 1911, the Paeroa branch of the Bank of New Zealand paid £116 10s 6d for 45oz 8dwt, and six months later £17 6s 6d for a much inferior 31oz 10dwt.³⁶⁵ Two parcels were sold to the Thames branch in December: one produced 22oz of melted gold, and the other, treated with cyanide, produced 50oz 13dwt.³⁶⁶ The last two consignments were purchased by the Paeroa branch in mid-April: one, of 14oz 2dwt, was worth £28 14s 6d, but the other, 74oz 10dwt, only £5 3s

³⁶¹ *Te Aroha News*, 28 October 1911, p. 2.

³⁶² John Henderson, assisted by J.A. Bartrum, *The Geology of the Aroha Subdivision, Hauraki, New Zealand: Geological Survey Bulletin No. 16 (New Series)* (Wellington, 1913), p. 15.

³⁶³ Henderson, pp. 117-118.

³⁶⁴ 'Diagram of Lode Fissures Te Aroha Mining Area', Henderson, facing p. 89.

³⁶⁵ Bank of New Zealand, Paeroa Branch, Gold Dealer's Book, entries for 1 November 1911, 14 December 1911, Bank of New Zealand Archives, Wellington.

³⁶⁶ Bank of New Zealand, Thames Branch, Gold Purchase Register 1899-1932, entries for 12 December 1911, Bank of New Zealand Archives, Wellington.

1d.³⁶⁷ In consequence, the battery was closed, protection obtained, and the company wound up in April 1913.³⁶⁸

In December 1912, two mining engineers inspected the workings on behalf of the Komata Reefs Company. Any interest in acquiring the ground was immediately quashed, as they were ‘very much disappointed’:

The amount of quartz in sight, good, bad, and indifferent, is altogether inadequate to warrant crushing operations being continued for more than a few months, even if there was enough gold in it to cover the cost of operations. The lowest level seems poorer than the upper ones and the reef pinches considerably. We did not like the class of country either, and both of us came to the conclusion that there is nothing there to warrant any further examination.... We were told the assay value of the ore coming through the screen of the mortar-box was 35/- per ton, but on asking the reason for the discrepancy between the assay value and the recovery, were told the gold was lost in the tailings. Judging from the appearance of the ore in the hopper, I should say the process as installed should save 80% of the value, and therefore come to the conclusion that the value was not in the ore at all.³⁶⁹

Both mine and battery were owned by various people over the next three decades.³⁷⁰ In February 1917, a syndicate lowered some quartz down the incline and asked the council for a new rope and ‘a few more’ tramway trucks.³⁷¹ When Paul visited in May, he found three men working in the mine and one in the battery. ‘Work at Mine consists of taking out lode by means of an open cut’. The average width of the reef was four feet, ‘said to be worth 30/- per ton’, and the battery was working eight hours a day. ‘This mine was taken over some six months ago by a syndicate, who have spent a

³⁶⁷ Bank of New Zealand, Paeroa Branch, Gold Dealer’s Book, entry for 15 April 1912, Bank of New Zealand Archives, Wellington.

³⁶⁸ Chairman of Directors to Shareholders, 7 November 1912; Resolutions carried at meetings of 10 April 1913, 6 May 1913, Company Files, BADZ 5181, box 226 no. 1332, ANZ-A; *Auckland Weekly News*, 17 April 1913, p. 36.

³⁶⁹ ?F.C. Brown to Komata Reefs G.M. Co., 20 December 1912, originally part of Malcolm Hardy Papers, Eric Coppard Papers, Waihi.

³⁷⁰ See paper on Bendigo Battery.

³⁷¹ Piako County Council, Minutes of Meeting of 19 February 1917; Memorandum of 23 February 1917, Letterbook 1916-1917, Matamata-Piako District Council Archives, Te Aroha.

considerable amount of money repairing the water race and Mill. Unfortunately when a start was made to send down the ore on hand to the Mill, only a few trucks had been sent down when the rope' on Butler's Incline broke 'and two trucks were smashed to pieces'. After some second-hand rope was obtained, ore was again sent down.³⁷² He subsequently reported that the reef averaged six feet wide, and that 'unless the values improve it will be found impossible to mine and treat 30/- ore at a profit'.³⁷³ One year later, work was confined to prospecting.³⁷⁴

In October 1918, four miners extracted 100 tons. East of the crosscut, on a five-foot wide lode they were opening up a block 70 feet in length, providing backs of 40 feet said to be worth £3 a ton. A block on the western side, 70 feet in length, was also ready for stoping.³⁷⁵ In the 12 months to March 1919, 60 tons were crushed for a return of £67.³⁷⁶ Paul reported, in April 1919, that the remaining two miners had 'recently' been dismissed, 'owing to the extraction falling far below expectations'.³⁷⁷ During 1920, when another 200 feet were driven on the Silver King lode and 300 tons were extracted, this was near where the lode hit the Premier Creek, in the Bonanza.³⁷⁸ In March 1921, Paul reported that Butler's Incline was being used 'constantly' by the syndicate, then employing eight men. The principal owner was 'confident' that he could 'make the ore opened up from the Smithy level on the Bendigo lode pay';³⁷⁹ it is not certain which level was being referred to. In the three years to August 1921, the syndicate claimed

³⁷² Inspector of Mines Reports, 1917, entry for 17 May, Mines Department, MD 1, 1917/86, ANZ-W.

³⁷³ Matthew Paul to Under-Secretary, Mines Department, 19 May 1917, Mines Department, MD 1, 21/2/4, ANZ-W.

³⁷⁴ Matthew Paul to Under-Secretary, Mines Department, n.d., *AJHR*, 1918, C-2, p. 31.

³⁷⁵ Matthew Paul to Under-Secretary, Mines Department, 18 October 1918, Mines Department, MD 1, 21/2/4, ANZ-W.

³⁷⁶ Matthew Paul to Under-Secretary, Mines Department, n.d., *AJHR*, 1919, C-2, p. 29.

³⁷⁷ Matthew Paul to Under-Secretary, Mines Department, 15 April 1919, Mines Department, MD 1, 21/2/4, ANZ-W.

³⁷⁸ Matthew Paul to Under-Secretary, Mines Department, n.d., *AJHR*, 1921, C-2, p. 26; see map of lodes in Henderson, facing p. 89.

³⁷⁹ Matthew Paul to Under-Secretary, Mines Department, 10 March 1921, Mines Department, MD 1, 21/2/4, ANZ-W.

to have spent 'about £6000 besides what we won'.³⁸⁰ Its miners, some of whom lived 'at the mine', kept the upper track open.³⁸¹ For the calendar year 1921, four men employed by the 'Bendigo Syndicate' crushed 40 tons for a return of 183oz 2dwt, valued at only £53 8s.³⁸² This return for driving and stoping 'did not come up to the anticipations', and work was 'temporarily suspended'.³⁸³ The suspension became permanent in the following year, when the syndicate abandoned their property.³⁸⁴

REWORKED IN THE 1930s

Waiorongomai Gold Mines was incorporated in November 1933.³⁸⁵ Its prospectus stated that it would work the Silver King reef in the former Cadman ground, recondition the Bendigo battery, 'and install an additional Oil Flotation Plant with a view to the commencement of crushing as early as practicable'.³⁸⁶ Included in the prospectus was a report by James Alexander Pond, a retired government analyst who was also a mining investor and owner of the Bendigo Battery,³⁸⁷ on the company's 30-acre Cadman claim:

In the Cadman holding there are several parallel lodes, the chief one being the Silver King, others being the Werahiko, Waitoki and Bonanza....

Taking the Silver King on which most work has been carried out, this lode has been driven upon on the Smithy level for about 600 feet while a new cross cut was put in from the Main County tram

³⁸⁰ J.E. Reid to Minister of Mines, 23 August 1921, Mines Department, MD1, 21/2/4, ANZ-W.

³⁸¹ Piako County Council, *Te Aroha News*, 21 April 1920, p. 2, 22 September 1920, p. 3, 22 September 1921, p. 3.

³⁸² *AJHR*, 1922, C-2, p. 10.

³⁸³ Matthew Paul to Under-Secretary, Mines Department, n.d., *AJHR*, 1922, C-2, p. 28.

³⁸⁴ J.E. Reid to Registrar, Te Aroha Warden's Court, 28 March 1931; J.E. Reid to Minister of Mines, 27 April 1931, Te Aroha Warden's Court, Mining Applications 1931, 4/1931, BCDG 11289/2a, ANZ-A.

³⁸⁵ *AJHR*, 1934, C-2, p. 44; for details of this company, see paper on company formation in the Te Aroha Mining District during the 1930s.

³⁸⁶ Waiorongomai Gold Mines Ltd, Prospectus, p. 4, Company Files, BADZ 5181, box 695 no. 4544, ANZ-A.

³⁸⁷ See paper on his life.

level to facilitate the output of ore. This lode varies in width from 3 feet to as much as 20 feet in the new cross cut where it is formed of lode and country in bands, some being strongly mineralised. Below this level at about 70 feet a drive has been put in for 330 feet, intersecting the lode and driven upon for about 100 feet in each direction. Most of the stone from this drive is very heavily mineralised and contains a considerable amount of copper.

The Silver King lode carries values for a considerable distance, certainly over half a mile in length and it is from this lode that most of the ore has been crushed.

The Werahiko and Waitoki were rich in the upper levels but have not been mined at lower levels, though a crosscut from the Silver King would locate them....

All the levels have iron rails laid down in them and there is a good supply of mining timber on the ground.³⁸⁸

(The smithy level referred to appears to be the one that in the early 1880s was the low level of the Werahiko; a flat area that can still be seen to its north was connected to this level by a short tramway.) Mining engineers had also reported favourably.³⁸⁹

The company drove on what had been the No. 2, or tramway, level of the Bendigo. By December, it had driven 102 feet, extending the crosscut to 1,197 feet from the portal. It was expected that within the next 50 to 100 feet it would intersect the Waitoki, Werahiko, and Moa reefs, 'each of which produced a certain amount of ore at 360ft higher'.³⁹⁰ The annual report, produced in September, claimed that high-grade ore had been found, and announced that negotiations were underway with a London mining group to develop the property on a large scale. The level had been driven another 187 feet, making a total of 277 feet driven by this company, and was expected to hit the Werahiko within the next 40.³⁹¹ Three months later, the mining inspector reported:

³⁸⁸ J.A. Pond to Secretary, Waiorongomai Gold Mines, 21 August 1933, printed in Waiorongomai Gold Mines Ltd, Prospectus, pp. 4-5, Company Files, BADZ 5181, box 695 no. 4544, ANZ-A.

³⁸⁹ *Te Aroha News*, 22 November 1933, p. 4.

³⁹⁰ J.F. Downey (Inspector of Mines), Report for Year Ending 31 December 1934, *AJHR*, 1935, C-2, p. 32.

³⁹¹ Waiorongomai Gold Mines Ltd, Annual Report, 30 September 1935, Eric Coppard Papers, Waihi.

The low level crosscut from the tramway level (at an elevation of 1,144ft)³⁹² was extended to 430ft with the object of intersecting the Waitoki and Werahiko reefs. Owing to lack of capital work had to be suspended at this point. It is considered that the reefs should be encountered within the next 80ft of driving. A block on the Silver King reef, which was intersected by a crosscut about 450ft northward, is ready for stoping.... No quartz was crushed during the year.³⁹³

This was the last report of any work being done in these mines, for the company collapsed in the following year.³⁹⁴

CONCLUSION

This portion of the goldfield was worked under a variety of names by a succession of miners and companies. Despite regular optimistic reports and gold of occasional value being extracted off and on, the results never lived up to expectations. Not daunted by these results, other miners took over the abandoned ground right up until the Depression of the 1930s, although sometimes hoping to sell it to overseas capitalists rather than work it themselves, for their predecessors' rate of success was not encouraging. Such was the fate of all the other Waiorongomai mines sooner or later; these ones were remarkable for being worked for most of the life of the field.

Appendix

Figure 1: G.H.A. Purchas, portion of blueprint of Waiorongomai goldfield, 8 January 1884, showing location of Werahiko, Waitoki, and Waitoki Extended claims, University of Waikato Map Library.

Figure 2: D.H. Bayldon, 'Silver King Licensed Holding, Waiorongomai, Te Aroha S.D., Applied for by Hugh McLiver & T. Gavin', 3 April 1888, SO 4788, University of Waikato Map Library.

³⁹² According to the company's plan of the mine, the elevation was 1,124 feet: Waiorongomai Gold Mining Company, Plan of Mine, n.d. [?1934], in private possession.

³⁹³ E.J. Scoble (Inspector of Mines), Report for Year Ending 31 December 1935, *AJHR*, 1936, C-2, p. 33.

³⁹⁴ J.F. Downey to Under-Secretary, Mines Department, 7 December 1936, Inspector of Mines, BBDO 18634, A902, MM8, ANZ-A.

Figure 3: E.A. Pavitt, 'Success No. 2 L.H.', 30 April 1888, SO 4959, University of Waikato Map Library.

Figure 4: D.H. Bayldon, 'Werahiko L.H., Waiorongomai, Te Aroha S.D., Applied for by H.H. Adams', n.d. [April 1888], SO 4881, University of Waikato Map Library.

Figure 5: Plan of Cadman, Bendigo, and Seddon workings, with former Waitoki and Werahiko workings on the line of the Moa or East and West lode, n.d. [early twentieth century?], drawn on earlier map of Waiorongomai goldfield, n.d. [c. 1888], in private possession. [Heights of workings are given in feet above sea level.]

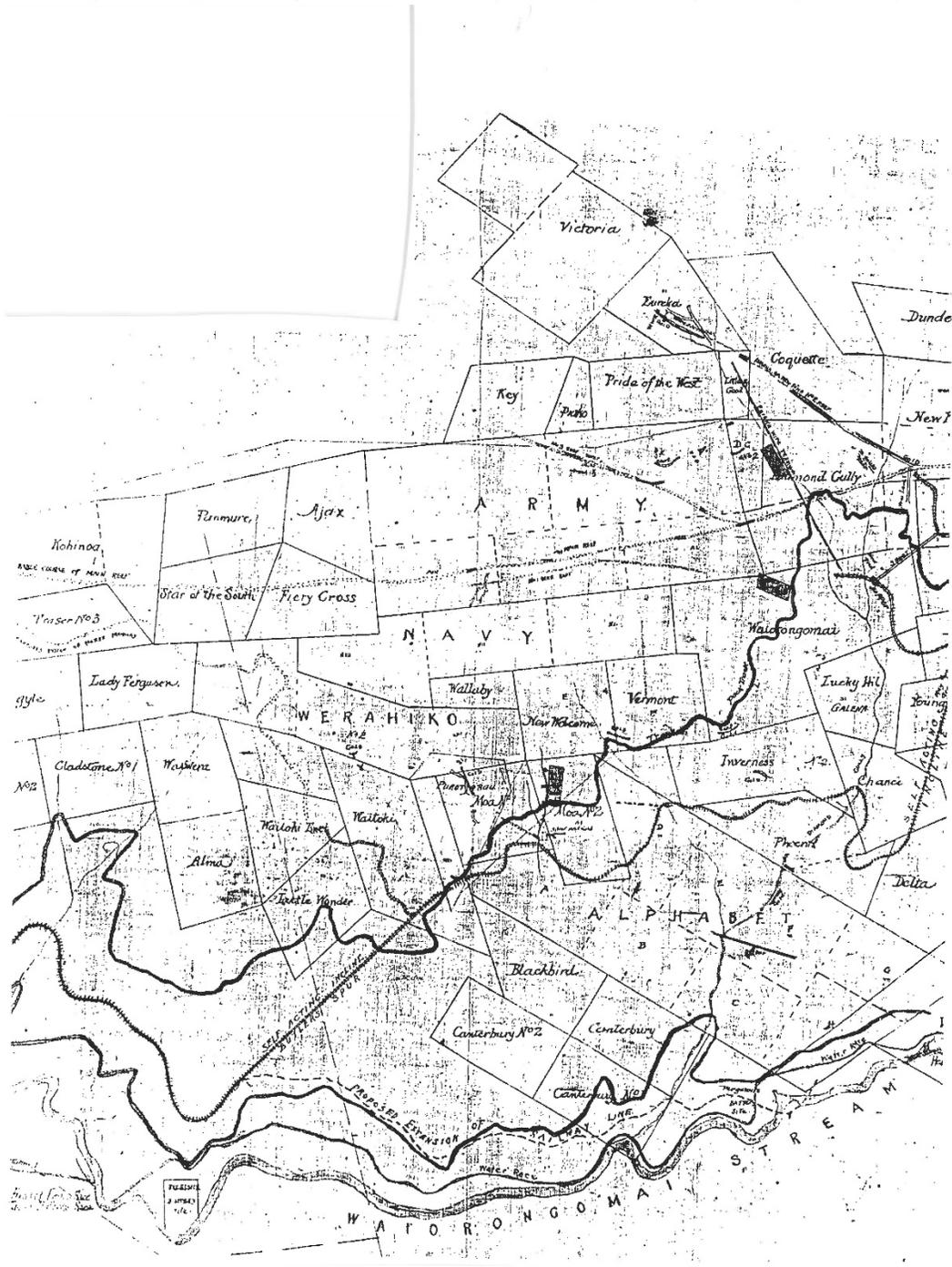


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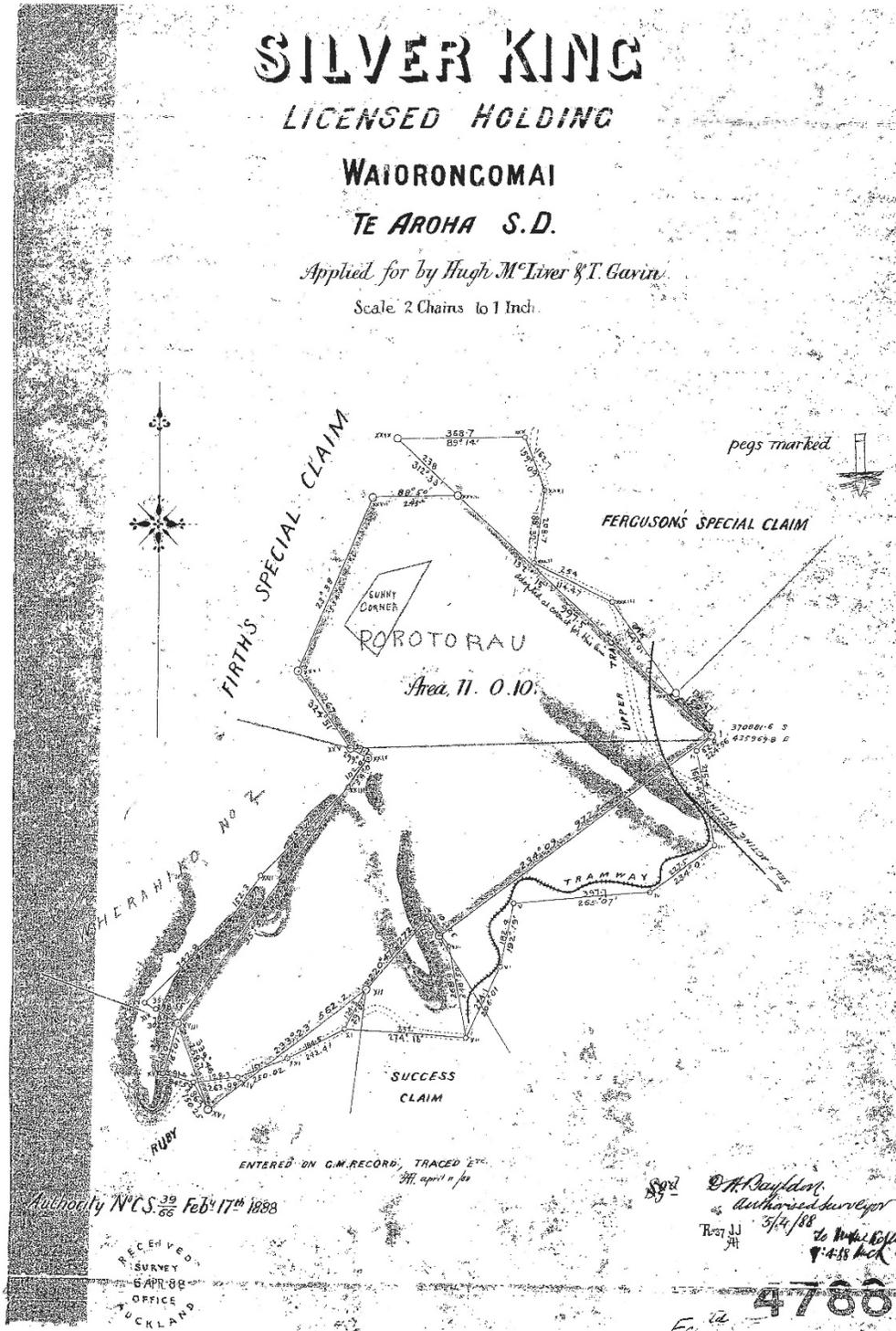


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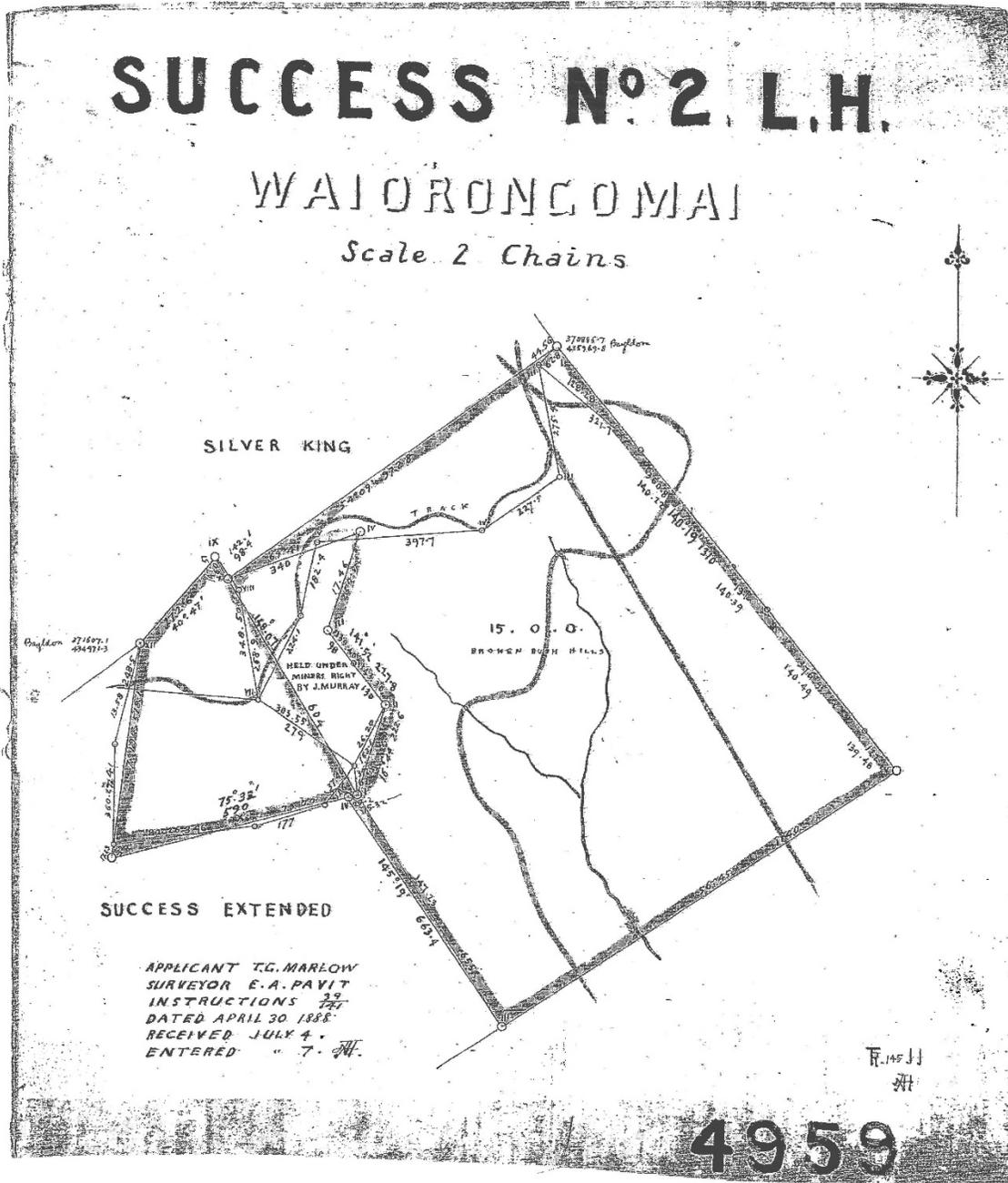


Figure 3: E.A. Pavitt, 'Success No. 2 L.H.', 30 April 1888, SO 4959, University of Waikato Map Library.

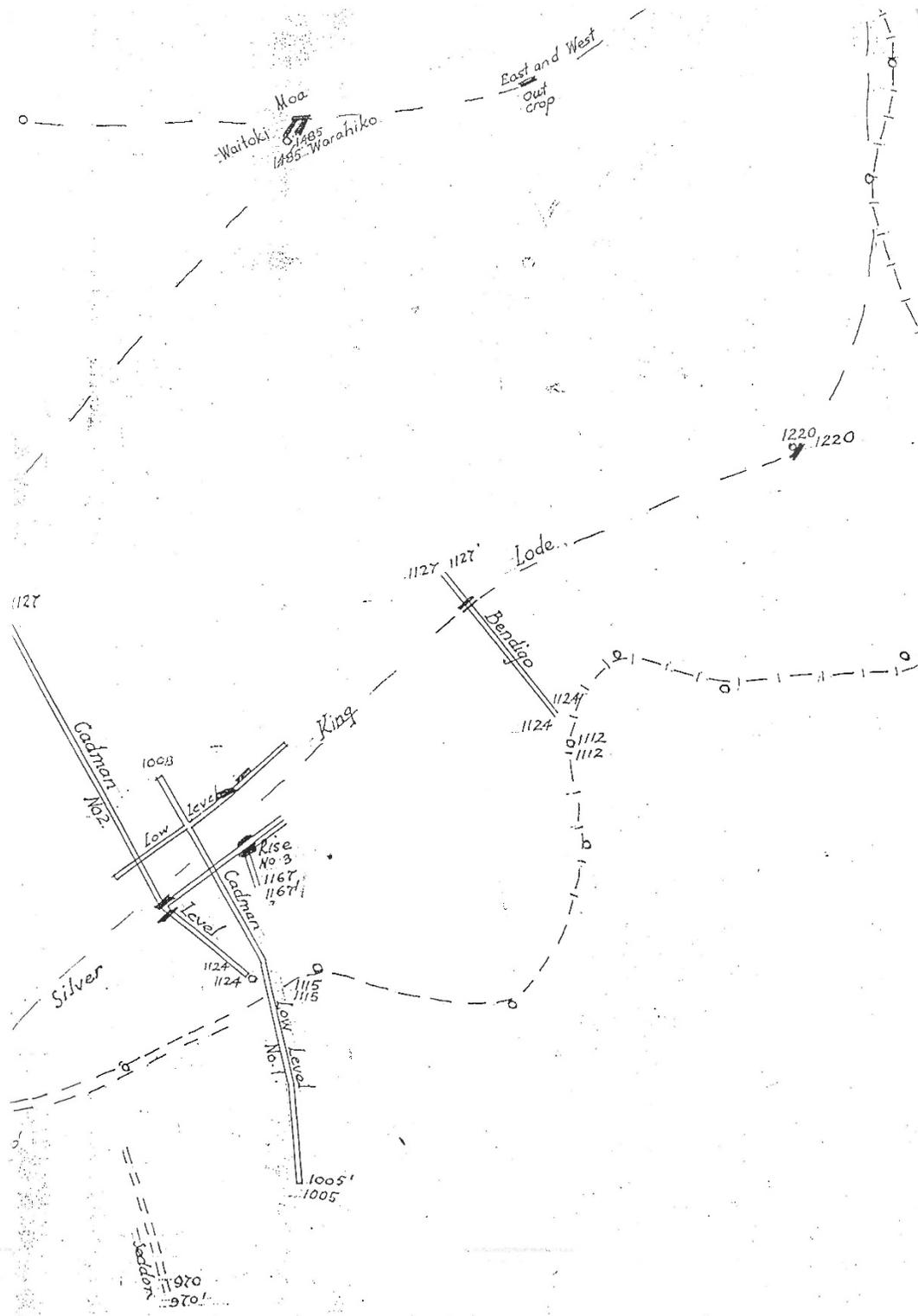


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