



MINERAL RESOURCES TASMANIA

**Archaeological Survey Report
1999/03**

**An archaeological survey
of the historic
Godkin silver lead mine**

By Parry Kostoglou





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1.0 INTRODUCTION

1.1 Job brief

This archaeological survey of the historic Godkin silver lead mine was commissioned by Mineral Resources Tasmania in order to quantify the scale and significance of historic machinery items at the mine. The consultant was therefore requested to undertake a full survey of the site including the completion of scaled plans and a full photographic record of its contents.

1.2 Methodology

Field work at the Godkin mine was undertaken over a two day period between 25–26 May 1999. During this period, the machinery remains at the North Godkin mine were recorded in association with the other resident features. In addition to this site, the South Godkin and Bell's Reward mines were also relocated and recorded. Subsequent to the completion of field work, half a day was spent at the MRT library and map rooms in order to compile all available information on the history of these mine sites.

1.3 Location of survey area

The Godkin silver lead mine lease formed a part of the historic Heazlewood mineral field at the so called '13 mile peg' on the Waratah to Corinna road. Today, the Godkin workings might be best described as occurring on the very southeastern slope of Mount Bell. This promontory is situated 3.5 kilometres southwest of the former Luina township. The mines described in this report are best accessed by a vehicle track commencing on the south side of the Waratah road in the vicinity of 13 Mile Creek. This vehicle track is driveable for approximately 750 metres. The remaining 1.25 kilometres to the North Godkin workings must be walked along the old and substantially overgrown Heazlewood pack track. Plate 1 shows a current 1:25 000 scale map of the area and the resident archaeological sites described in this report.

1.4 Constraints

Unfortunately, the archived records of the Inspectorate of Machinery, which might have provided details about the 2 cylinder engine at the North Godkin mine, were unavailable at the time of this report's authorship.

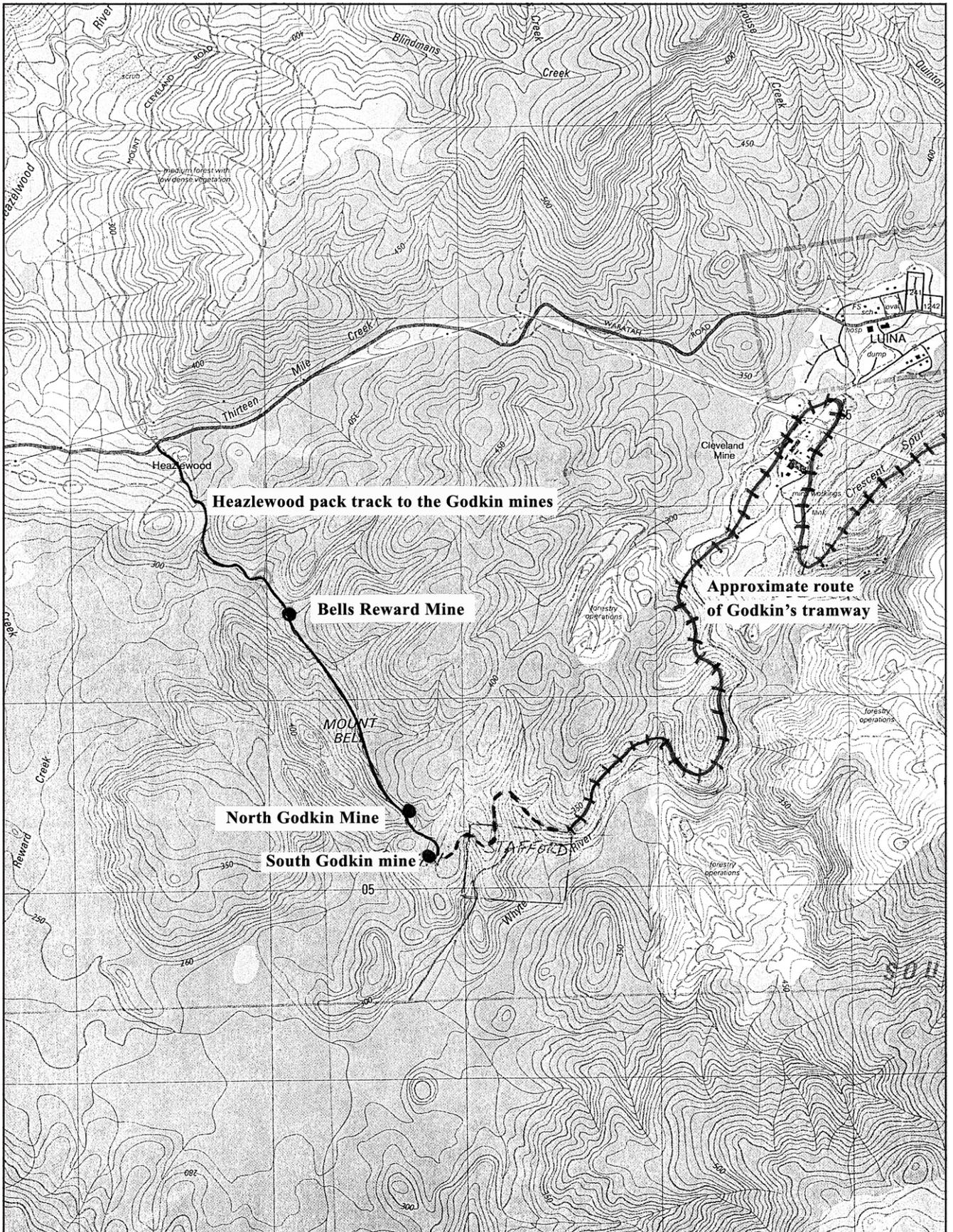


Plate 1

Current 1:25 000 scale topographic map showing location and extent of survey area.

2.0 STATEMENT OF SIGNIFICANCE

Historically, the Godkin mines and their sister workings around the 13 Mile peg, are unremarkable silver lead mines dating from between the late 1880's to the early 1920's. These mines were neither early nor important discoveries leading to the enlargement of the west coast's economy or population. They also failed to yield any payable amounts of silver or lead ore, and would have been abandoned far sooner but for off shore speculative zeal which saw Victorian finance prop up the bulk of the mines here. In stark contrast to their lack of historical importance however, the Godkin mines are of exceptional archaeological significance, because the resident mine plant has not been pilfered or salvaged. What remains at these mines is basically what was left behind in the early 1920's. Likewise the quality or rarity of the items of machinery left behind here is impressive. The upright engine and Worthington pumps appear to be quite rare artefacts of their type. Likewise the *in situ* Cornish boiler and its composite brick jacket is now a rare feature at historic mines. In summary, what the Godkin mines lack in historical significance, are more than compensated for by the quality and extent of their resident physical remains.

3.0 RECOMMENDATIONS

As a result of this survey, the following recommendations in regard to the Godkin mines and the surrounding Heazlewood mineral field, are made.

3.1 The North and South Godkin mining leases

Deemed to be archaeologically significant mine sites, the surviving physical remains of the shaft side machinery and related plant at both the North and South Godkin workings are to be protected from all deleterious activities. These might be foreseeably initiated by future mining exploration or members of the public seeking bottles or machinery collectables. Given the sites proximity to State forest, the threat from logging or related roadmaking activities in the future should not be discounted. As such it is further recommended that a copy of this report be provided to the Senior Archaeologist of the Forest Practices Board, and that all sites described by this report be added to Forestry Tasmania's GIS data base.

3.2 The North Godkin mine machinery

Because of the exceptional state and extent of preservation of the mine side machinery at the North Godkin mine, it is further recommended that a management plan or policy guidelines be prepared in order to examine how best to protect this site. During this survey, a recent 4-wheel bike track was discovered which was being deliberately constructed to access the North Godkin, presumably with the intention of salvaging the machinery there for profit. In addition to publicly warning potential vandals in the region that MRT is actively protecting the site, some further thought will have to be given as to how the site can be safeguarded in the long term.

3.3 Other mines in the Heazlewood/Whyte River mining fields

During the documentary research component of this survey, it became increasingly evident that several major mineral fields converge in the vicinity of the Godkin mines including the 16 mile mines at the Heazlewood field, Magnet/North Magnet mines, Whyte River silver lead mines south of Luina and the Corinna/Pieman gold fields. It is suggested that some thought be given to more systematically integrating planning and execution of survey work at these mineral fields. For example, instead of merely surveying the Godkin mines, it would have been possible with a bit of prior planning to survey all the 13 mile mines at the Heazlewood field.

4.0 HISTORICAL OVERVIEW

The silver lead ore lode which would ultimately be worked by up to a dozen mines in addition to the Godkin, was discovered by two prospectors; William R. Bell and J. Smith, in 1886. In the following year, both received reward claims for their services upon which each established a mine. Mr Bell's was henceforth known as Bell's Reward, whereas Mr Smith called his mine, the Discoverer. These first two discoveries were followed by a third between late 1887/early 1888, when Mr Norman Godkin discovered another lode of silver/lead ore further to the southeast near the Whyte River. In June 1888, 'Godkin's Find' was pegged as two 40 acre leases, and then registered in the name of Mr A. Spencer. An adjacent 80 acre claim titled the Godkin Extended had meanwhile been taken out by a Mr J. H. Horne in April. These leases were shortly followed by at least ten other separate leases between the Heazlewood and Whyte rivers, in the vicinity of the 13 mile peg on the Waratah to Corinna road. As such these workings were all

collectively dubbed 'The Thirteen Mile mines'. Another ore lode was discovered three miles further west around the 16 mile peg, and these two lodes would subsequently be referred to collectively as the Heazlewood mineral field.

In 1887, this new find was reported briefly by the Secretary of Mines, who informed Parliament that *An important discovery of silver lead has been made by Messrs. Smith, Bell and others at the Heazlewood River. The deposit is highly spoken of* (Secretary for Mines Report for 1887/88). In order to raise the necessary capital to establish a large and modern mine, the men controlling Godkin's Find went to Victoria and after raising sufficient interest there, saw the formation of the Godkin Silver Mining Company. Other lessees such as Mr W. R. Bell and J. Smith however, were not so keen to surrender control of their discoveries to offshore interests, and sought to develop their mines using private capital. In 1888, the Government geologist G. Thureau made a brief visit to the newly established workings clustered south of the 13 mile peg, but found that the bulk of the workings, including Godkin's Discovery, had been insufficiently opened up to allow for a proper inspection. A year later in 1889, Thureau once again declined to inspect the workings, this time lamenting that *until the road now in progress is completed, no real test of the value of the mines here can be had* (Secretary for Mines Report for 1889). Thureau's successor, A. Montgomery, however proved more willing to oblige, and in 1890, he made a tour of the mines throughout the Heazlewood district, finding three well established mines amongst the 13 mile leases. These were W. R. Bell's sections, Godkin's, and Godkin's Extended. Although all three mines had commenced deep tunnelling activities, Montgomery, like his predecessor Thureau, found these workings too poorly developed to justify the exaggerated rumours of riches currently doing the rounds of west coast inns and hostleries.

Taking all the properties on the line into consideration, it may be said that while they all have been proved to contain silver, not one of them is yet opened up sufficiently to warrant any glowing estimate of their value... While therefore, the prospects of the district quite warrant a large expenditure in opening up the mines, it is only fair to warn investors that a considerable time must elapse before they can hope to receive dividends. (Secretary for Mines Report for 1890, pp.17-18.)

Even more impetuous were plans to commence concentrating and smelting the little ore discovered to date. Once again Montgomery cautioned *In the meantime, the erection of works for recovering the silver is quite premature, as the nature of the ore to be dealt with is yet uncertain... Until a great deal more work has been done, and both quantity and quality of the ore have been proved, no reduction works need be thought of. The metallurgical treatment of the ore is far too important a matter to be lightly decided on.* (Secretary for Mines Report for 1890, p.17).

By 1890 the Heazlewood mines, typified by the Godkin, were frantically extending their underground workings and infrastructure, still apparently indifferent to the cautions uttered by Thureau and his successor Montgomery. Their doubts were proven correct in 1893, when almost all the mines at the Heazlewood field, including the Godkin, closed down. In 1895, Montgomery himself reported the closures to his superiors, openly chiding the amateurish and disunited attempts made to date by the various rival mining parties there: *Mining in the Whyte River and Heazlewood Districts for some considerable time past has been nearly at a standstill – in fact, almost dead, and though there are still many who firmly believe there is a prosperous future before both places, still I hardly think the experience of the past warrants too great faith in the future, unless the conditions are different to what (sic) obtained in the past. The stretch of country is extensive and contains many good shows, but it requires a large capital to test and develop these shows. It is true a large amount of money has been spent on these fields, but that spent is a mere drop to what is really required. Possibly if the money had been spent on two or three sections instead of twenty or thirty the result would have been different.* (Secretary for Mines Report for 1895. p.18).

In 1895, the Godkin Company's Victorian shareholders voted in favour of forming a new company to take over the mine workings. In November 1895, the (Victoria) Magnet Silver Mining Company No Liability was registered, but an inspection of the dormant mine in 1897 found that at the Godkin: *All the workings on the southern section were full of water below the 45 foot level* (Harcourt Smith, 1897. p.8). Until the turn of the century, work at the Godkin consisted in the main of dewatering the mine. Meanwhile work at Bell's Reward had failed to locate any ore body of substance, and in 1903, a syndicate titled the Godkin Extended Amalgamated Company was formed which from now on would collectively mine the three workings formerly known as Bell's Reward, the Discoverer and the Godkin Extended.

In 1912, the Victorian Magnet Silver Mining now acquired the Amalgamated Company's leases and absorbed these along with some neighbouring ones into a 278 acre consolidated lease (No. 5760M). This company spent the bulk of its efforts attempting to tap the Godkin lode in the former Godkin/Godkin Extended leases, Between 1913 and 1922, little work appears to have occurred despite the lease consolidation. In December 1923, the Secretary of Mines informed Parliament that the Victoria Magnet mine had been closed down and all its assets sold. Both consolidated leases held by the Victoria Magnet Silver Mining Company NL were subsequently surrendered in February 1924. In the mid 1960's, the Electrolytic Zinc Company of Hobart undertook an exploratory drilling program on the Godkin line of lode, and drilled several holes in the old Bells Reward, Godkin Extended and Discoverer mine leases. Although some encouraging ore samples were recovered, no further exploration or mining was ever proposed. The Heazlewood mineral field remains abandoned to this day.

5.0 SITE REPORTS

Workings related to three mines were recorded during this survey. These were: Bell's Reward, the North Godkin shaft and the South Godkin main shaft.

5.1 Bell's Reward silver mine

LOCATION

The remains of what appears to be the Bell's Reward mine are located beside a creek near the 1.2 kilometre mark on the walking track from Heazlewood to the Godkin mines. This location is marked on Plate 1 which shows a current 1:25 000 scale map of the area.

HISTORY

Having completed the first successful prospect in the Heazlewood field in association with Mr J. Smith in 1886, Mr W. R. Bell was awarded a 20 acre Reward claim (44/87M) which he subsequently consolidated with a second 40 acre (887/87M) block in 1887. These two sections were subsequently known as Bell's Reward mine. In 1890, Geologist Montgomery inspected the 13 mile workings at the Heazlewood field and its resident line of lode, of which he noted *Immense quantities of gossan, carrying a little silver, are found in a line running about NW and SE from these sections down to the Whyte River. This has come to be called Godkin's line of lode, but ought to be known Bell's, as Bell's discovery was prior to Godkin's.*⁽¹⁾

In examining the principal earth works on the lease, Montgomery noted a shallow drive and tunnel, which were too modest yet to be of any great promise. A year later (1891) a private source noted that *Adjoining Smiths is the Bell's Reward, lately floated into a company. Mr E. L. Rossman is Manager. This mine was opened out under the supervision of Mr Bottriell, and proved to be one of the shows on this field, the proprietors, Smith and Bell, preferring to open it up at their own private cost before putting it on the market, an example it might be well if more followed. The lode has been tested by shafts, tunnelling etc.*⁽²⁾

By 1892, work at all the Heazlewood mines including Bell's, had slackened as they failed to locate a profitable large scale ore body. In 1897, Geologist J. Harcourt Smith visited Bell's Reward and found the workings all but closed after water had flooded the main workings. He subsequently wrote *The workings are situated on the 20 acre block, and consist of several tunnels and a main shaft 156 feet deep. The main adit, which is about 500 feet long, was unfortunately blocked at the entrance, and as the shaft was full of water it was quite impossible to form any idea of the value of this property. On the surface there is a strong gossan outcrop which can be traced through the Discoverer, Godkin Extended and Godkin sections, the general strike being about NW to SE.... In an open cut close to the engine house, I noticed little chloride of silver... The main shaft is a roomy one, being 13 ft. x 4 ft. in the clear, and well timbered as far as could be seen. From the bottom I believe cross-cuts were put in SW, 120 feet and NW 40 feet, when a burst of water drove the men out, and no work has since been done. It is probable that the lode was struck, and it seems a great pity that after spending so much money no effort was made to get the water out and see what the lode was like.*⁽³⁾

The next visit in 1900 saw the mine now renamed 'The Result', although Mr W. R. Bell still appeared to be part of the operation as it was he who showed the government geologist W. H. Twelvrees over the workings. Twelvrees noted *This mine used to be known as the Bells Reward, and the workings are on the 20 acre section. The main adit has been driven about 500 feet.. The roof has fallen in, and I, consequently could not enter the tunnel, but Mr. W. R. Bell described to me the ground passed through in driving... As far as I can learn, a few tons of ore were sent to market formerly, with between 60 and 70 ounces of silver per ton.*⁽⁴⁾

In 1901, mining recommenced at the Result, and by 1902 it was reported that *Several tons of ore have been sent from this mine lately, but of very low grade – not sufficient to pay: still, Mr. Bell keeps working on, with four men.*⁽⁵⁾

In 1903, a syndicate titled the Godkin Extended Amalgamated Company was formed to collectively mine the three workings formerly known as Bell's Reward/Result, the Discoverer and the Godkin Extended. Throughout 1903–1904 work proceeded in driving a low level adit to find the continuation of the lode discovered in the number 1 adit. Before this new tunnelling had reached the required 800 foot extent however, it was abandoned.

In 1912, the Victorian Magnet Silver Mining Company, which also owned the adjacent Godkin workings, now acquired the Amalgamated Co's. leases and absorbed these along with some neighbouring ones into a 278 acre consolidated lease (No. 5760M). This company spent the bulk of its efforts however, attempting to tap the Godkin lode in the former Godkin/Godkin Extended leases, and thus pre-occupied, all but ignored the old Bell's Reward workings, which do not appear to have been re-worked before the parent company abandoned this entire field in late 1923.

In the mid 1960's, the Electrolytic Zinc Company of Hobart undertook an exploratory drilling program on the Godkin line of lode, and as a part of this drilled three holes in the Bell's Reward section⁽⁶⁾. The mixed results resulted in no further activity taking place, and the workings are dormant to this day.

DESCRIPTION

The remains at what appears to be the approximate location of Bell's Reward mine consist of a collapsed adit and dam site situated beside a trackside clearing.

Underground workings

Groves (1966) states that the Bell's Reward workings to the north essentially consisted of an adit measuring 600–700 feet in length and a shaft 154 feet deep. No physical examination of any underground workings at this site was undertaken.

Clearing

The most obvious site indicator here is a 20 × 10 metre wide clearing in the regrowth where a consolidated layer of mine mullock has been covered by a layer of grass. Several domestic artefacts, including a metal bucket and at least two red bricks, were noted at this site.

Adit

The existence of a collapsed adit was discovered in the scrub line some 20 metres west of the clearing described above.

Dam

The resident creek on the eastern side of the walking track has been dammed by the formation of a low two metre high earthen rampart. This has since been breached.

REFERENCES

1. Montgomery, 1890, pp. 16–17.
2. Tilley, 1891, p.79.
3. Harcourt Smith, 1897, p. xlix.
4. Twelvetrees, 1900, pp. clxxiv–clxxv.
5. Secretary of Mines Report for 1901/02. P. cxviii.
6. Groves, 1966, p. 27.

5.2 The Godkin silver lead mine

LOCATION

The North shaft and Main shafts comprising the Godkin mine are situated between Mount Bell and the Whyte River as indicated in Plate 1.

HISTORY

After the successful strikes made by Messrs W. R. Bell and J. Smith, Godkin's New Discovery was the third successful prospect at the Heazlewood field, undertaken some time during the closing months of 1887. Midway through the following year, two 40 acre leases (1599/87M and 1615/87M) were taken out around this strike by a Mr A. Spencer, and the successful prospectors sent a delegation to Melbourne to drum up offshore support for the development of a mine. Their success was assured with the formation of the Godkin Silver Mining Company, which was formed in late 1889 with a nominal capital of 100,000 pounds issued in one pound shares ⁽¹⁾. When the two leases were vested in the new company's name in early 1890, mining was commenced in earnest on the southern lease (1615/87M), and a main shaft, known as the Number 1 tunnel, became the focus of the company's attentions. In 1890, Geologist Montgomery reported that:

A good deal of driving has been done to prove the ground. What is known as Number 1 tunnel has been driven about 300 feet right through the dyke... About 40 feet north of the mouth of Number 1 tunnel, a shaft has been sunk 60 feet on the edge of the dyke... About 30 feet to the south of the mouth of the tunnel an air shaft has been sunk to meet an adit coming in at a lower level... The tunnel to meet this shaft is known as No. 4... Another drive, No.3, has been put in about 90 feet, some little distance higher up the hill than No. 1.⁽²⁾

At the northern lease, Montgomery found a smaller tunnel in progress. *In the northern of the two sections held by this company (1599-87M), there is yet another drive running about N.80° W. This is about 100 feet long... Some silver chloride was also found in this.*⁽³⁾

Some months later, the Secretary for Mines was informed that *At the Godkin Silver Mine, Whyte River, extensive machinery is in course of erection — in fact, at this date is about finished... A bulk sample of 25 tons of ore was sent away by this company, which gave a very satisfactory return* ⁽⁴⁾. By late 1891, it was being reported that the 340 foot drive had exposed a valuable deposit of manganese gossan in addition to galena, native silver and chlorides.⁽⁵⁾

By late 1892 however, miners at the Godkin had ceased dispatching any further parcels of ore as their managers pondered how best to further develop the mine. The problem they faced involved the opposing locations of the most promising ore and the mine machinery. The past year had shown that the most important mineral lode on the Godkin property was in fact the gossan lode discovered in the number 5 tunnel on the northern lease. Unfortunately, in concentrating on the southern lease, the company had situated its pumping and milling plant at that location. As the northern lease required deepening to better access the gossan lode, mine water was expected to be a major problem and the company now faced a quandary, whether to move their precious pumps or drain the northern workings by other means. Geologist Montgomery returned again to the Godkin workings later that year, and described the problem as he saw it.

It is clearly necessary to sink deeper, and the company have now to consider the best way of opening up the lode at a greater depth; the most obvious way would be to sink the north shaft deeper and open the lode from it; this involves putting a pumping engine on the shaft and enlarging and re-timbering it before sinking could be resumed. It has been proposed to remove the Worthington pump from the main engine shaft on the south section to the north shaft, but I cannot see that this would be a really effective solution to the difficulty, for the experience now gained as to the quantity of water in the country renders it highly probable that the present plant will not be able to cope with it...⁽⁶⁾

Montgomery then endorsed another proposal. *An alternative proposal has been made, which seems to me in the present state of the Company to be the most advisable to adopt, namely to drive in to the lode in the south section from the Whyte River and then to drive along the lode to below the north shaft. Surveys have been made by the officers of the mine which show that an adit could be driven to cut the lode immediately under the mouth of number 4 tunnel at a depth of 111 feet below the brace of the main engine shaft, or almost at the present 110 foot level. The south west corner of the southern section is very flat lying ground, and an open tail race is proposed to be brought in from the side of the Whyte River for a distance of about 12 chains, at the end of which it will be 10 or 12 feet deep. For about 500 feet further the depth will gradually increase to about 20 feet, and it will depend on the nature of the country whether an open cutting can be taken in or a tunnel driven... The entire cost of the work would probably amount to 2500 pounds when completed.⁽⁷⁾*

Finally Montgomery pointed out the advantages of this somewhat ambitious excavation work. *The benefit of it would, however, be perceived long before completion, for it is probable that soon after cutting the lode the latter would drain so as to enable the north shaft to be sunk to the level of the new tunnel and work carried on from the north end also, while a considerable amount of stoping of ore might also be anticipated to be done...⁽⁸⁾*

The acting mine manager of the day, Mr Godkin, also pointed out to Montgomery that relocation of the Worthington pump would cost at least 1000 pounds, and in the loss of the pump and its engine plant from the south shaft, the resident ore dressing works there would be useless. The linking of both workings by a drainage tunnel would also solve another problem involving the removal of ore from the north shaft to the dressing sheds at the Main (south) shaft, which would otherwise require the construction of an expensive aerial ropeway.⁽⁹⁾

While reaching a decision, the Godkin Silver Mining Company fell into financial difficulty and ceased work at the mine. In 1895, it was reported that no work had been done at the Godkin for some time. While this inactivity was being reported to Parliament by the Secretary of Mines, the Godkin Company's Victorian shareholders were endorsing the formation of a new company to service old debts and take control of the mine workings ⁽¹⁰⁾. In November 1895, the Magnet Silver Mining Company No Liability was accordingly registered, although it became more popularly known as the Victorian Magnet Silver Mining Co. NL in order to distinguish it from the nearby Magnet mine. After buying the Godkin mines outright and then intending to start mining in earnest, the new company found that during its dormancy, the Godkin mine had become flooded. This problem had not been redressed nearly 18 months later in 1897. The next Government geologist, J. Harcourt Smith, examined the Heazlewood field and found that at the Godkin:

All the workings on the southern section were full of water below the 45 foot level, and the only work that is being done is at the north shaft. A small pumping plant has been erected here, and the shaft sunk to 80 feet below the level of No. 5 tunnel. The bottom of the shaft is in gossan...Mr Scaddon, the mine manager, informed me that the gossan contained a little silver, but not in payable quantities.⁽¹¹⁾

The pumping plant at the North shaft referred to here by Harcourt Smith would appear to have been the same pump compliment which is plainly visible beside the North shaft today (see *Description* section).

In 1900/1901 it was briefly reported that *The Godkin Company is putting in a tunnel at as low a level as possible, for the purpose of opening up the mine, and is saving the cost of pumping machinery* ⁽¹²⁾. The mine management, however belatedly, were now implementing the drainage blue print recommended by geologist Montgomery some 10 years earlier. A year later, the Secretary of Mines reported that the six men employed in cutting this drainage tunnel to drain the main shaft, had driven 700 feet, but still had another 100 feet to go. Geologist Twelvetrees confided in another more expansive report during 1903 that:

When I was here, a large drainage tunnel was being driven from the Whyte River, to connect with the old 110 foot level in the Godkin mine. The manager stated the intention was to drive and overhaul the old workings. Once the drainage is

affected, the old works can be thoroughly examined, and the old main shaft put in working condition. Sinking at the north shaft can also be restarted, and the lode-belt thoroughly explored at depths considerably greater than previously worked.⁽¹³⁾

In the next Secretary's report, the job was said to have been completed, with "bad air and bad ground" being blamed for the delay in completion. By late 1903, the company had 50 tons of second class ore stacked in a paddock on the surface awaiting shipment. Having completed the drainage tunnel between the Whyte River and the Main shaft (southern lease), the company next sought to extend this tunnel at the 110 foot level to the north shaft, as the Secretary of Mines explained:

Mr. H. T. Jones, manager reports as follows:- The S. W. drive from the 110 foot level has been continued to 900 feet from the main shaft, and is still being driven with the object of cutting a lode formation which outcrops in that direction. . . A distance of 63 feet has been reached in mineralised limestone. It is thought that the contact will be met with at about 100 feet; if not, a cross-cut will be put in.⁽¹⁴⁾

In June 1909, the Victoria Magnet Silver Mining Company NL cancelled the old Godkin leases and took out an enlarged 183 acre consolidated lease (4007M). In 1912, this company then acquired the adjacent leases including Bell's Reward which had been formerly held by an amalgamated syndicate (see Bell's Reward). Little work appears to have occurred between 1913 and 1922 despite the lease consolidation, and operations at the mine were referred to somewhat dubiously as 'prospecting'. In the first half of 1923, five men were employed driving and cross cutting from an unspecified tunnel into an 'oxidised zone of country'.

Government Geologist P. B. Nye visited the consolidated Godkin workings at this time and made what was to be the last government report on this mine as an active one. He found the various drives from the main shaft in the southern section either flooded or aborted in barren rock and clay. Likewise in regard to the northern section, he stated *Although these workings on the North Godkin are extensive, they have revealed no lode of any value.*⁽¹⁵⁾ These words were to prove an unremarkable eulogy for the Godkin. In December that year, the Secretary of Mines informed Parliament that the Victoria Magnet mine (Late Godkin) had been closed down and all its assets sold. Both consolidated leases held by the Victoria Magnet Silver Mining Company NL were subsequently void in February 1924. A diamond drilling program conducted by the Electrolytic Zinc Company in the mid 1960's, does not appear to have re-investigated the Godkin leases, although it did bore several holes at the adjacent Godkin Extended and Bell's Reward workings. Given its operational lifespan over some 35 odd years, the total ore production figures for the Godkin are modest to say the least. Groves (1965) states that it yielded 52.3 tons of lead refined from an estimated 327 tons of ore.

DESCRIPTION

The Godkin mine consisted of two separate shafted workings/winding facilities situated in two adjacent but separately registered 40 acre leases. The northernmost lease (1599/87M) surrounded what was to become known as the Northern shaft, while the southern lease (1615/87M) contained the older Main shaft. Both leases were historically linked to the other mines in the 13 mile field and the Waratah-Corinna road by a pack track. A narrow gauge timber tramway carted ore from the mines back to Waratah. Today these mines are still best accessed by the old pack track. Both mine sites occur in tall regrowth mixed forest. Reference should be made to Plate 2 which shows a scaled plan of the mine site.

(1) North Godkin

The North Godkin mine site is situated near the northwestern corner of cancelled lease number 1599/87M. The mine site lies on the southeastern slope of Mount Bell and as such has been excavated to provide a split level working area. The site is comprised of a boiler precinct on the highest tier of the site, while the shaft, engine, winding gear and pumps occur in an excavated cutting below the boiler. A set of finger shaped mullock dumps occur east of the shaft. The entire site measures some 40 × 65 metres in dimension.

Underground workings

The North Godkin section was worked to a depth of 210 feet from two adits and a shaft. Only the North shaft was located during the survey and this was not examined below ground level, although a tape measure lowered to the bottom of the North shaft reached a depth of 50+ metres.

Water reservoir

The westernmost feature at the North Godkin site is a two metre squared earthen excavation. This feature formerly held a ship's water tank for use in supplying the adjacent boiler with water.

Bricked in boiler

Located 2.5 m east of the water reservoir is a composite brick/stone boiler jacket and its *in situ* boiler within. The jacket measures 8 × 3 × 2.1 m in height and is a consistent 0.5 m in thickness. Unusually, the northern side of the jacket is composed of mortared ashlar/nodular stone sections, while the southern side has been built from machine made red bricks. At the very western and tapered end of the jacket is a 1.5 m squared flue on which the boiler

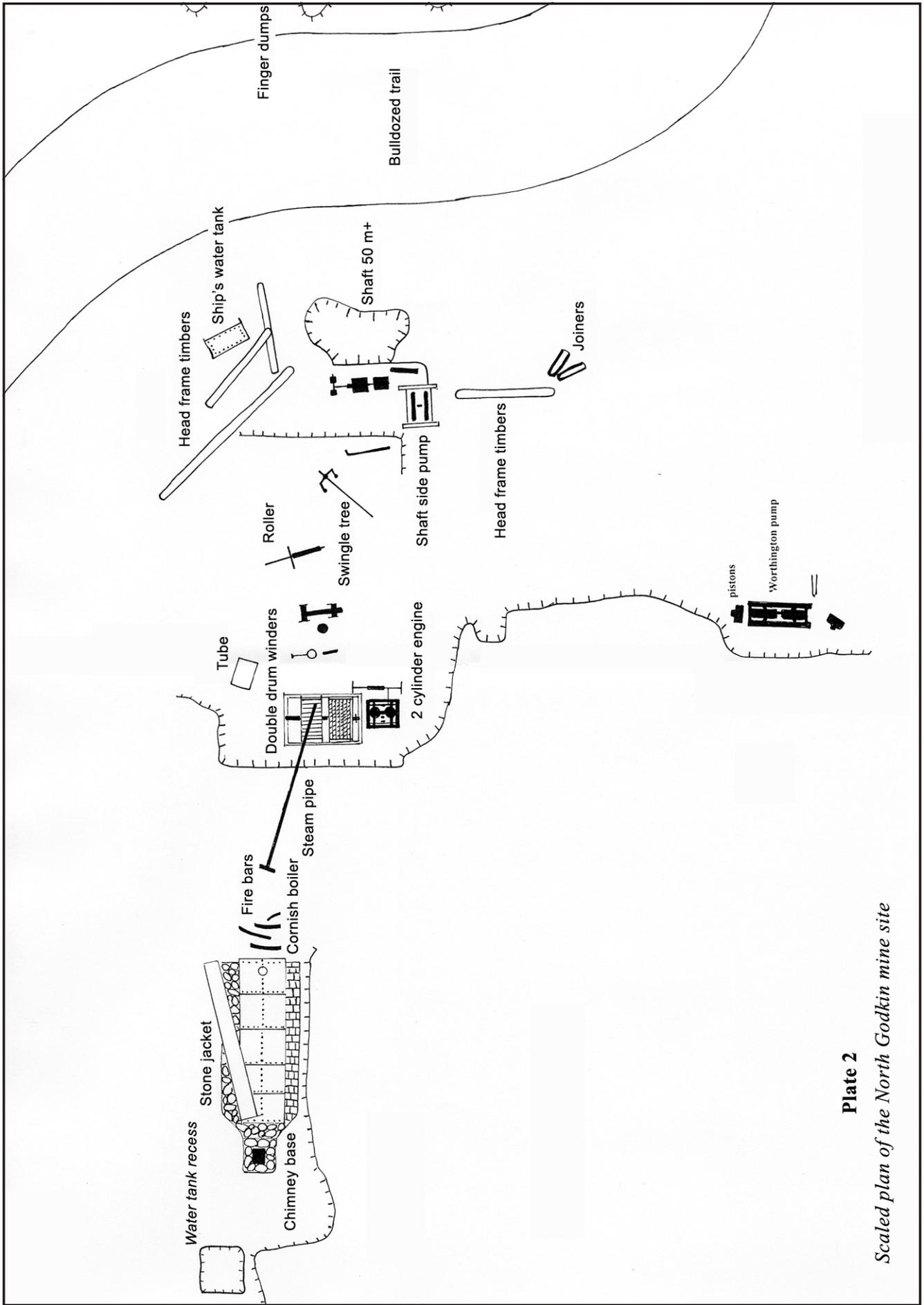


Plate 2

Scaled plan of the North Godkin mine site

chimney once stood. The cylindrical boiler chimney itself, measuring 6.5 × 0.5 m in diameter, lies toppled on the top of the boiler jacket. The large horizontal Cornish boiler lying within the jacket measures 6.5 × 1.7 × 1.4 m in height.

Water pipe

A seven metre long section of one inch diameter steam pipe lies on the ground between the boiler and the double drum winder described below. This conveyed steam from the boiler to the engine adjacent to the winder drums.

Mine side earthen terrace

A 30 × 3.5 m high earthen terrace commences eight metres due west of the boiler/jacket. All of the remaining North Godkin mine features described below occur on the lower eastern bank of this terrace.

Double drum winder

Situated below the terrace 20 m southeast of the boiler precinct are the extremely well preserved remains of the mine's winding gear and related engine. This winding plant was employed to move men and materials up and down the north shaft. The winding gear consists of two 1.5 metre diameter winding drums supported by their axles on an iron frame. The southernmost drum spool is still full of steel cable. A toothed gear wheel lying parallel to the southernmost drum formerly engaged both this drum and the adjacent engine to transfer power from the latter.

Engine

Immediately south of the double drum winder is the engine used to power the winding gear and nearby mine pumps. The plant is an upright two-cylinder stationary engine powered by steam from the nearby boiler. No makers plate or embossing could be found on the engine to identify its manufacturer. All of the drive assembly linking the engine to the adjacent drum winder is present but not currently articulated.

Horse whim?

The ten metre squared expanse of ground between the winding gear and shaft side pumping gear is littered with a number of artefacts which appear to indicate the use of horse power at some time in the process of raising and lowering men and materials within the shaft. This is all the more curious given that only ten metres away stand the remains of the mechanised winding plant. The major artefacts at this scatter are the remains of a swingle tree and roller. The so called swingle tree consists of the hooks and connected iron rod which linked the horse's harness to the whim's central axle and roller. The axle and roller lie adjacent and consist of a one metre long spinning roller fitted to an iron shaft. Other minor artefacts include a horse shoe and part of a leather harness.

In situ pump

A toppled pump housing and adjacent piston pair/bearing block lie immediately west of the North shaft collar. This pump plant is supported by an iron frame, which is partially visible above the mine shaft. This equipment appears to be the smaller pump assembly said to have been erected here in 1897 (Harcourt Smith, 1897) after the larger Worthington pump was abandoned (see below) after its removal from the main shaft at the South Godkin.

North shaft precinct

In addition to the *in situ* pump described above, the North shaft area is littered with a number of other features. The shaft's head frame is still evidenced by four large timber beams, the largest measuring 7.5 × 0.35 m in diameter. At least two of these are certainly the head frame uprights. A number of iron 'joiners' lie scattered around these timbers, which were used to prevent the timbers from splitting at their ends. A rivetted ship's water tank lies beside the largest timber at the northeastern corner of the shaft precinct. The shaft collar itself measures 4.5 × 2.5 m in dimension. A tape measure lowered down the shaft ran out of tape at the 50 m mark, indicating that that it is entirely open and has not collapsed.

Bulldozed track

A six metre wide track made by a bulldozer blade bisects the site immediately east of the shaft precinct. It presumably dates from the diamond drilling program undertaken in the mid 1960s.

Finger dumps

A set of three finger shaped mullock dumps lie on the eastern side of the bulldozed track. These dumps are 1.5 m in width and two metres high, and the longest is at least 25 m in length. This very modest amount of resident mullock here is consistent with the tiny tonnage of ore said to have resulted from this mine.

Abandoned pump

Standing 15 m south of the winding gear/shaft precinct are the remains of a large mine pump. The manufacturers name and details are embossed on the side of the steam pump: HENRY WORTHINGTON, NEW YORK. USA. In 1892, geologist Montgomery saw this pump working at the South Godkin's main shaft, although mine management at the time were debating whether to move it to the north shaft. This was obviously undertaken. However, it appears that another smaller pumping unit still *in situ* beside the north shaft today (described

previously) was installed instead in 1897, and the Worthington plant abandoned where it lies today. In addition to the main body of the steam pump itself, two pistons, a rod pump connector and several fragmentary ferrous items litter the vicinity.

(2) South Godkin mine

The South Godkin mine site is situated in the very centre of cancelled lease number 1615/87M. The mine site lies on a slight slope 300 m southeast of the North Godkin mine workings. The site is comprised of the shaft precinct and some 40 m to the south, the residential enclave/mine operations area. This mine site is the junction of the walking track from the North Godkin and the track to Stafford/Luina.

Underground workings

The South Godkin section was worked to a depth of 110 feet on three levels from the main shaft. No attempt was made to enter any of the workings.

Main shaft

The main shaft measures 4 × 3 m in dimension. The collar has collapsed and the shaft is only four metres deep at this time.

Head sheave/head frame timbers

The most striking feature at the shaft is the large 3.5 m diameter head sheave; the narrow grooved pulley wheel over which the steel winding cable ran. Adjacent to the shaft and resident head sheave are a number of six metre long headframe uprights with metal joiners attached.

Mullock dumps

A number of assorted sized mullock dumps up to 30 × 20 × 4 m in height occur between the Main shaft and the settlement further south.

Air shaft

The 3 × 2 m mouth of what appears to be an air shaft was located near the settlement site described below.

Assay office chimney?

The northernmost feature along the bank hosting the settlement site is a well built firebrick chimney measuring 1.5 × 2 × 2 m in height. Some of the constituent firebricks retain the stamp 'South Yarra Brick Company' on one side. A broken crucible was also found near this chimney, and this feature is assumed to mark the site of the mine's assay office.

Ore dressing sheds

Historical sources state that the Godkin mine's ore dressing sheds were erected beside the Main shaft. Although they were not identified during this all too brief examination, evidence of such plant should exist in this vicinity.

Settlement site

Staggered along the bank some 30 metres south of the assay office are a series of smaller drystone chimneys made of mine mullock. None of these chimneys stand higher than 0.5 m, but they remain well defined. Large scatters of domestic artefactual material, such as bottle glass and sheet iron debris, litter the vicinities of these features. A ship's water tank also lies near this enclave. These structures are assumed to be the collective remains of a housing enclave for the Godkin's miners.

Tramway remains

A set of narrow gauge tram bogie wheels and an earthen right of way 60 m southwest of the mine shaft mark the approximate location of the former Godkin tramway.

REFERENCES

1. Nye, 1923, p. 110.
2. Montgomery, 1890, p. 17.
3. Montgomery, 1890, p. 17.
4. Secretary of Mines report for 1890-91, p. 8.
5. Tilley, 1891, pp. 79-80.
6. Montgomery, 1892, p. 8.
7. Montgomery, 1892, p. 8.
8. Montgomery, 1892, p. 9.

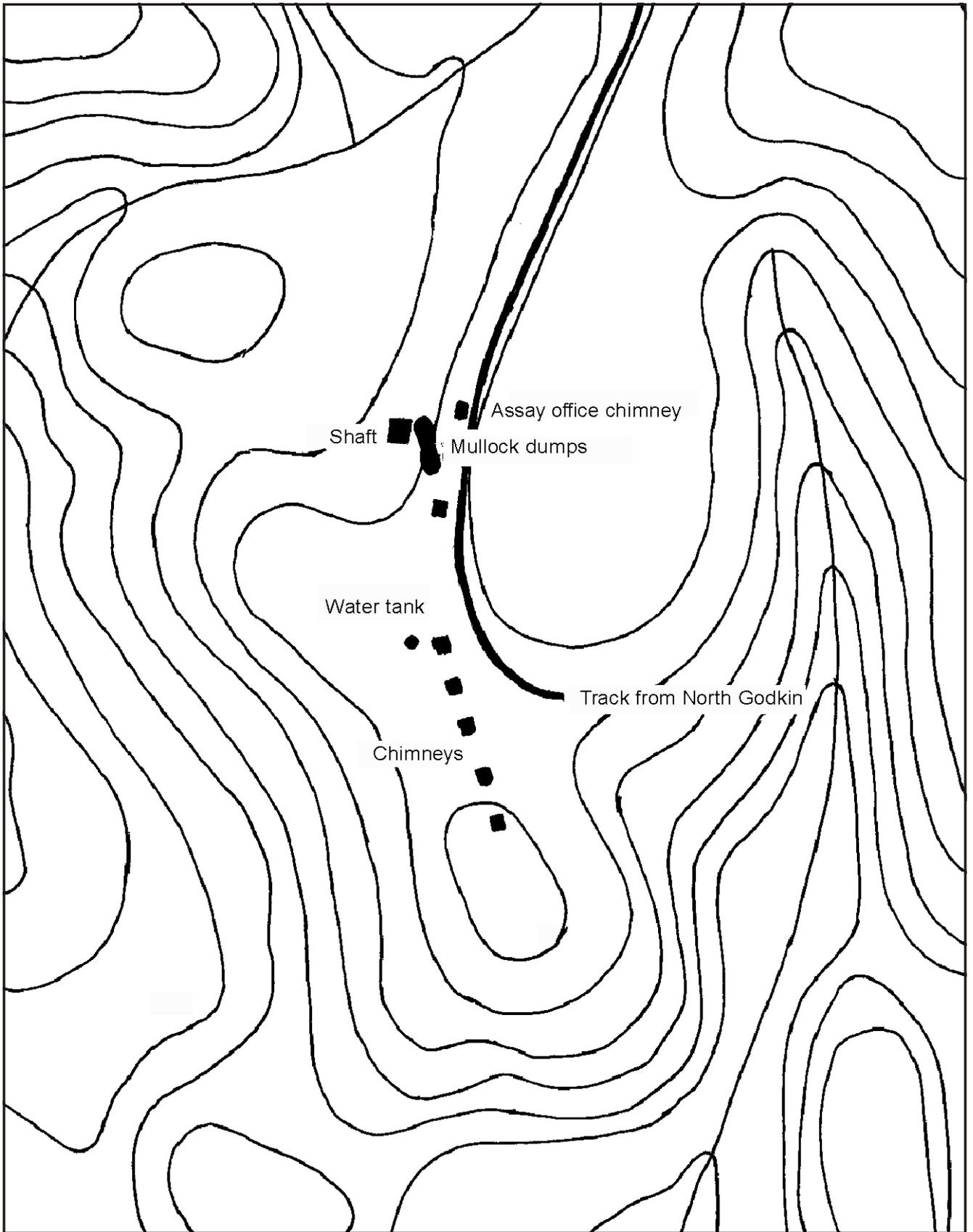


Plate 3

Unscaled plan of the South Godkin mine site.

9. Montgomery, 1892, p. 9.
10. Nye, 1923. p. 110.
11. Harcourt Smith, 1897. p. 1.
12. Secretary for Mines report for 1900–1901, p. lxxxviii
13. Twelvetrees, 1903, p. 25.
14. Progress of Mineral Industry of Tasmania for quarter ending 31st March, 1905, p. 14.
15. Nye, 1923, p. 118.

5.3 Godkin tramway and Heazlewood track

LOCATION

The Godkin tramway ultimately ran in a northeasterly direction from the South Godkin mine to the outskirts of Waratah township. The relevant features described below were all noted in the vicinity of the South Godkin mine. Although the precise route of the rest of the tramway has not been researched for this report, some sections appear marked on historic mine lease surveys in the Appendix section of this report.

HISTORY

Between its discovery in 1886/1887 and 1889, the Godkin mine and its neighbours were accessed and resupplied by a crude hand-cut pack track from the 14 mile hut on the Waratah to Corinna road. By 1890 however, the Godkin Silver Mining Company took the decision to build a tramway from its mine back to Waratah, and construction was soon begun. In his report for 1890/91, the Secretary of Mines reported that *This company (Godkin) has completed three miles of tramway, and is engaged in extending the same about six miles further, in the direction of Waratah*⁽¹⁾. By the end of 1891, the six mile extension had been completed and open to goods traffic. As part of his introductory description of the Godkin workings in an 1892 report, geologist Montgomery stated that *There is a good road from Waratah to within three miles of the mine, and the latter is connected with a road by a wooden tramway; this has also been continued right up the slope of the Magnet Range to the Arthur River, six miles from Waratah.*⁽²⁾

Later in the same report however, Montgomery criticised the tramway openly, stating that *In my opinion a mistake was made in extending the tramway from the Whyte River to the Arthur River. From the mine to the Whyte River it was required, but from the latter the road would serve all present purposes. Should the mine become of importance the tramway to the Arthur would be very useful, but it has been erected needlessly soon, and money that would have been better spent in underground work is locked up in it.*⁽³⁾

When the Godkin mine fell on hard times during the early 1890's, the tramway was all but abandoned and at the turn of the century visitors to the mineral field spoke now in the past tense of the 'Old Godkin Tram'⁽⁴⁾. Until the final abandonment of the Godkin leases in 1923, the mines were serviced once again by pack horse teams which walked along the abandoned line between the 14 mile hut on the Waratah Road and the mine.

DESCRIPTION

Godkin Tramway

Only one small section of the line in the vicinity of the South Godkin mine was examined, and this was because the former right of way is the only navigable route through the bush. A set of tram bogie wheels was found at the South Godkin site beside the three metre wide tramway formation.

Heazlewood mines track

The track from the 14 mile hut on the Waratah–Corinna road to the Godkin mines consists of a benched and level easement constructed around the lower western slopes of Mount Bell. The track measures approximately 3.5 m in width, and may have been widened in parts by bulldozer activity relating to exploration work in the 1960's.

REFERENCES

1. Secretary of Mines report for 1890-91. p. 8.
2. Montgomery, 1893, p. 3.
3. Montgomery, 1893, p. 10.
4. Twelvetrees, 1903, p. 27.

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- THUREAU, G. 1888. Report on the Heazlewood silver lead and other ore deposits in the county of Russell, West Tasmania. *Report of the Secretary for Mines Tasmania* 1888/1889.
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- TWELVETREES, W. H. 1900. Report on the mineral fields between Waratah and Corinna. *Report of the Secretary for Mines Tasmania* 1899/1900:cxl-ccviii.
- TWELVETREES, W. H. 1903. *Report on mineral fields between Waratah and Long Plains*. Department of Mines Tasmania.

PERIODICALS

- Secretary of Mines reports between 1887 and 1923.
- Progress of the Mineral Industry of Tasmania*. Reports between 1895 and 1910.

LEASE

Gold mining consolidated lease number 4007M

APPENDIX 1
Contemporary survey photographs



Plate 4
Clearing at Bell's Reward mine.



Plate 5
Bricked in Cornish boiler and toppled chimney at the North Godkin.



Plate 6

Double drum winder with 2 cylinder engine at extreme left, North Godkin.



Plate 7

Another general view of the winder drums and engine, North Godkin.



Plate 8

Detail of double drums, North Godkin. Note one with cable and without it.



Plate 9

The 2 cylinder engine and the drive linkage for the double drum winders, North Godkin.



Plate 10

The 2 cylinder engine and the drive linkage for the double drum winders, North Godkin.



Plate 11

Small components littering the vicinity of the engine/winding drums, North Godkin.



Plate 12

Swingle tree from a horse whim, North Godkin.



Plate 13

*Central whim axle or roller,
North Godkin.*



Plate 14

Shaft side pump piston, North Godkin



Plate 15

Shaft side pump piston, North Godkin



Plate 16

Another view showing overturned pump and its foundation, North Godkin.



Plate 17

Metal joiners used to prevent headframe timbers from splitting, North Godkin.



Plate 18

Ship's water tank beside North Godkin shaft.



Plate 19

'Finger' type mullock dumps beside North Godkin shaft.



Plate 20

Discarded Worthington pump at North Godkin.



Plate 21

Discarded Worthington pump at North Godkin.



Plate 22

View of one of the pistons from the Worthington pump.



Plate 23

Head sheave from the toppled head frame above the South Godkin shaft.



Plate 24

Head sheave from the toppled head frame above the South Godkin shaft.



Plate 25

Timber uprights and metal joiners from the South Godkin headframe.



Plate 26

Timber uprights and metal joiners from the South Godkin headframe.



Plate 27

Ship's water tank at South Godkin settlement.



Plate 28

Firebrick chimney from assay office, South Godkin.



Plate 29

*Bottle dump at
South Godkin settlement.*

APPENDIX 2

Historic maps and plans

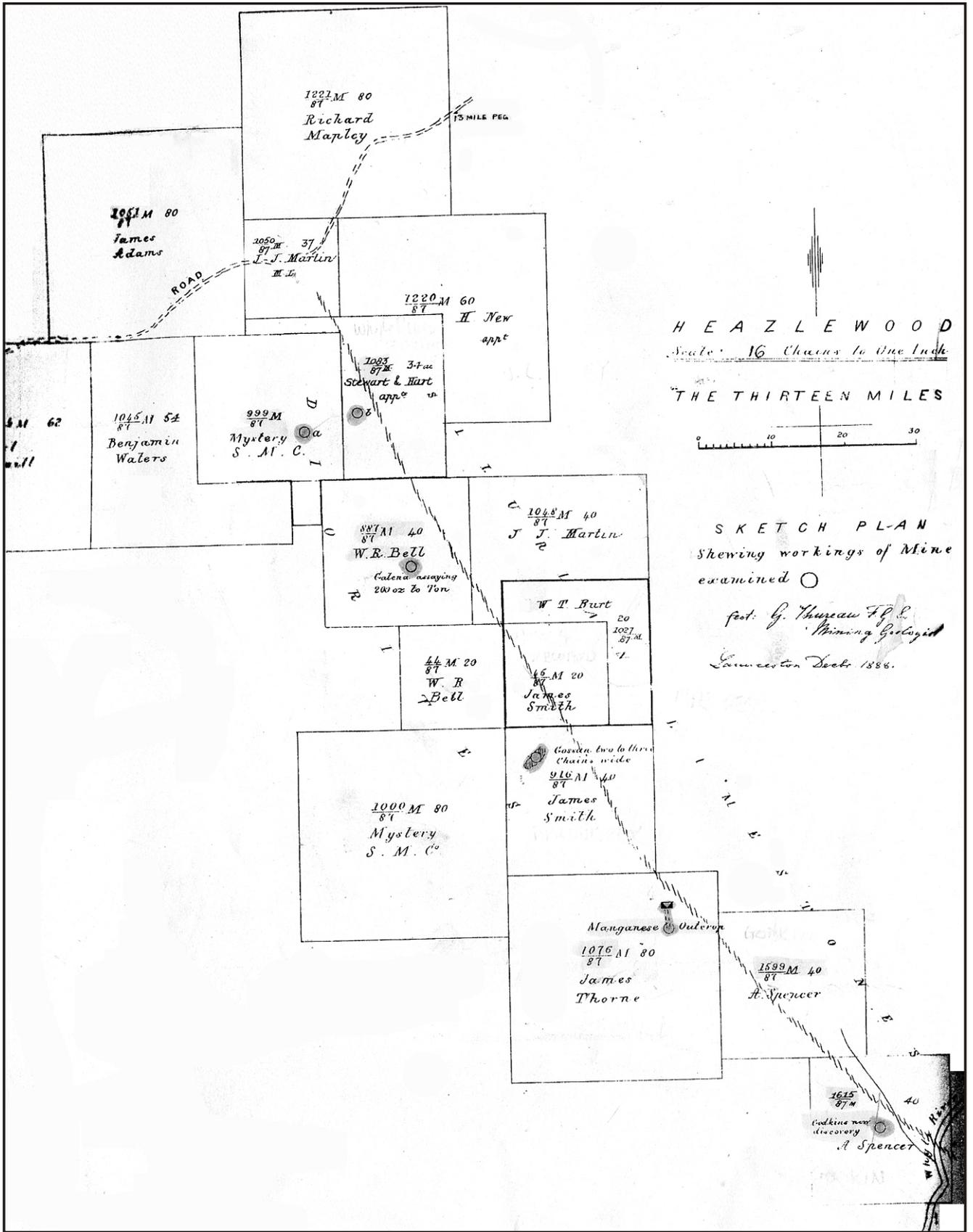


Plate 30

Lease survey of the 13 mile mines soon after their discovery, by Thureau in 1888.

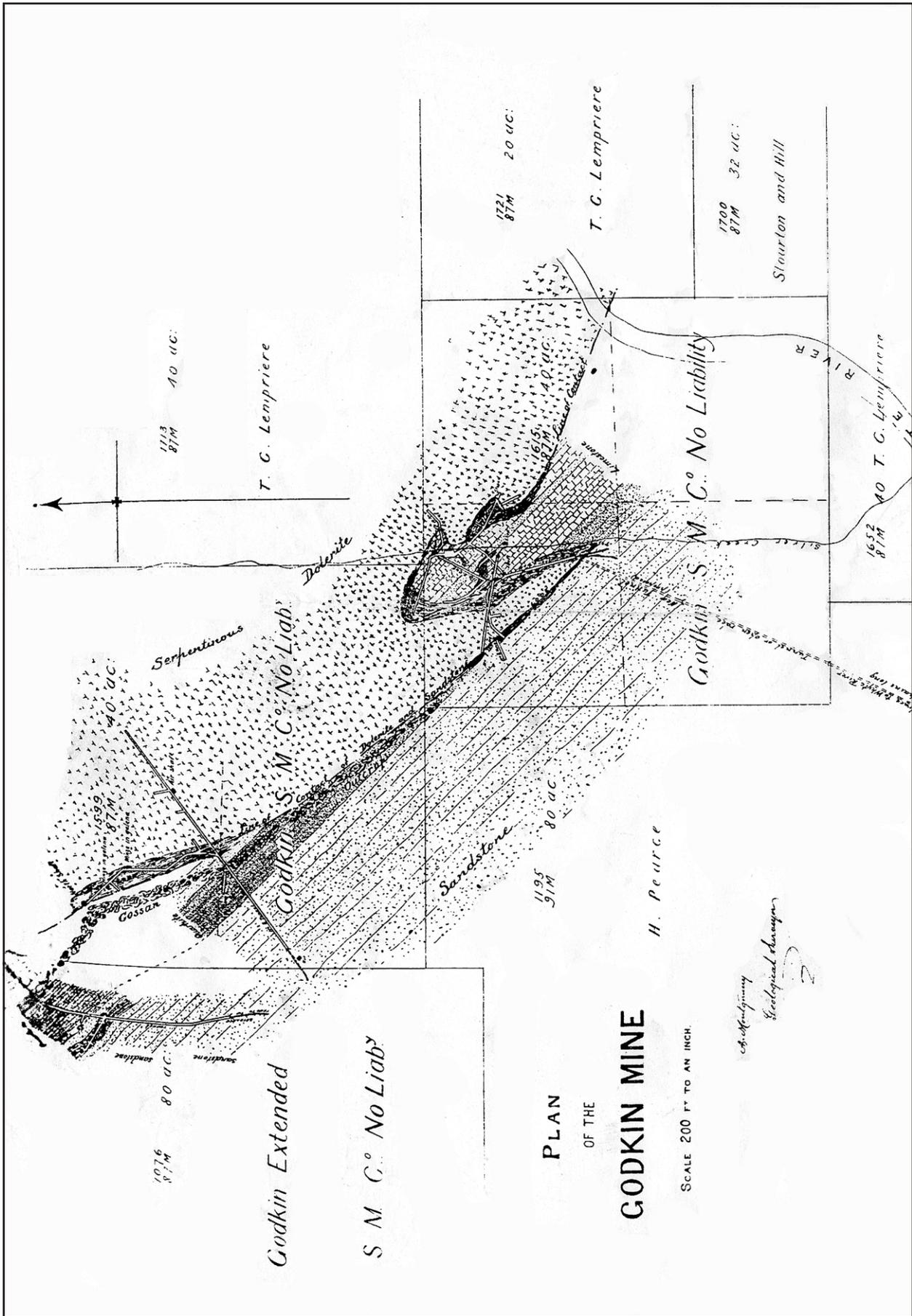


Plate 31. Survey of the Godkin mine leases and underground workings by Montgomery in 1893.

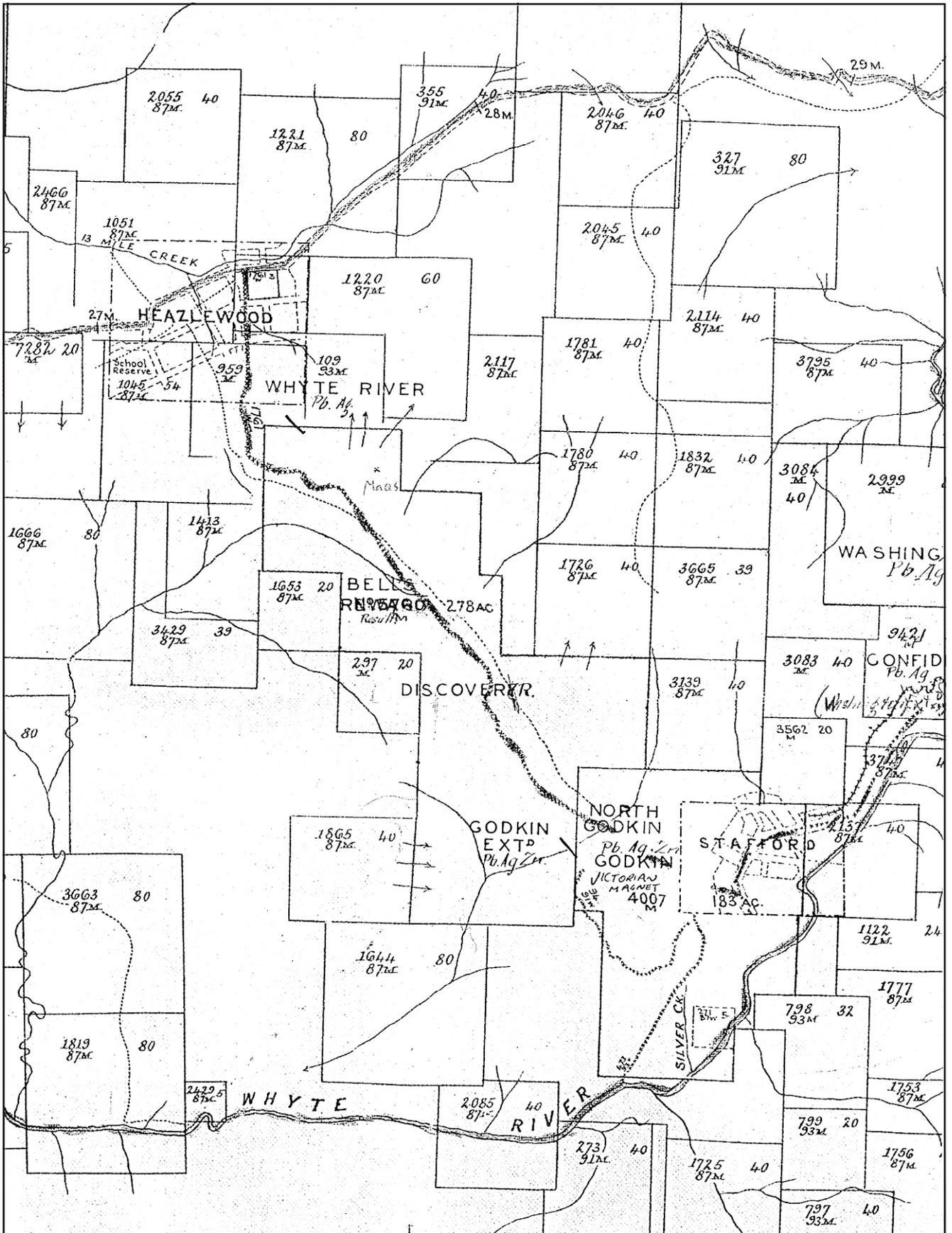


Plate 35

1935 survey chart showing former Godkin leases (MRT map 140).

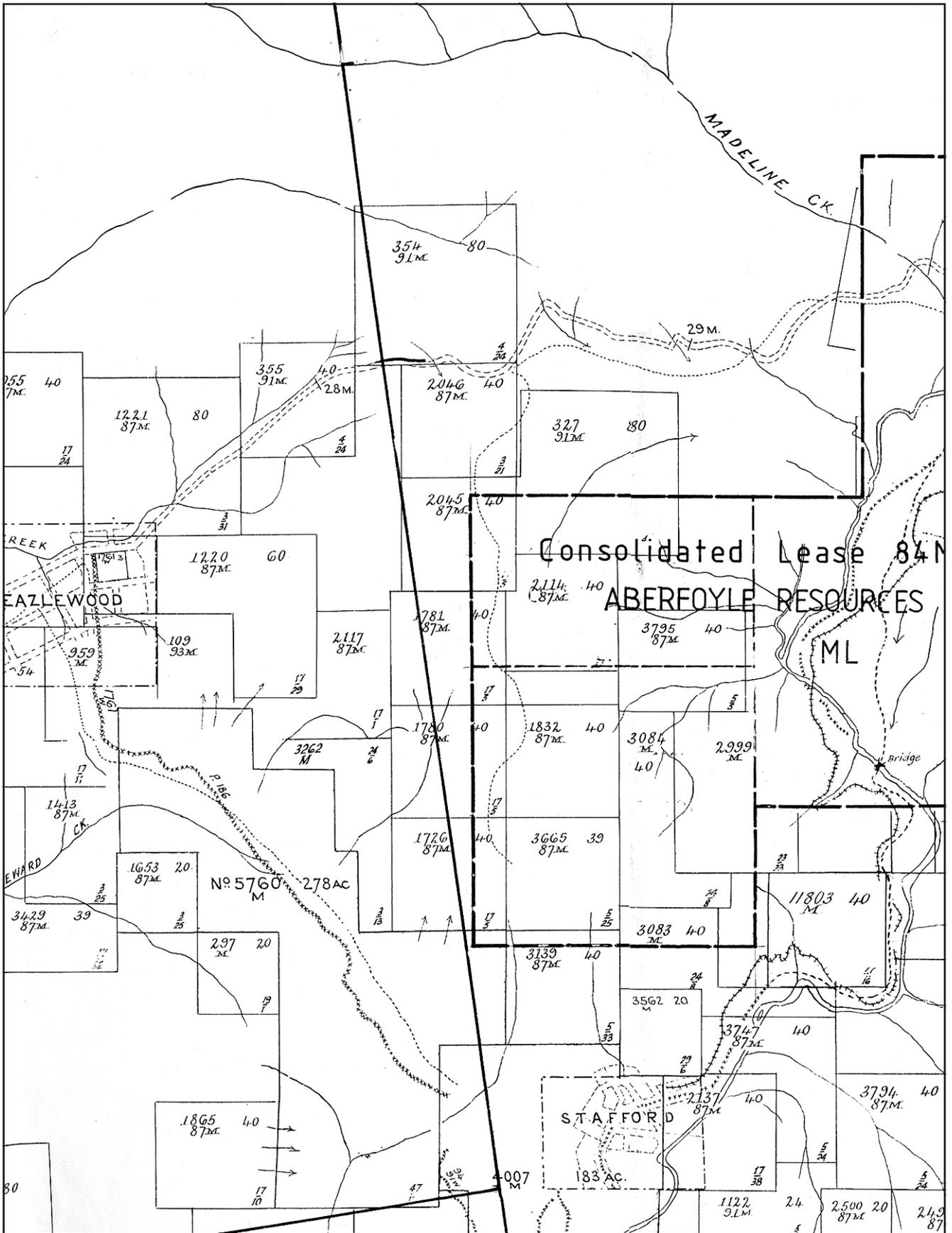


Plate 36

Most recent survey chart showing lease No. 5760/M covering cancelled Godkin leases.

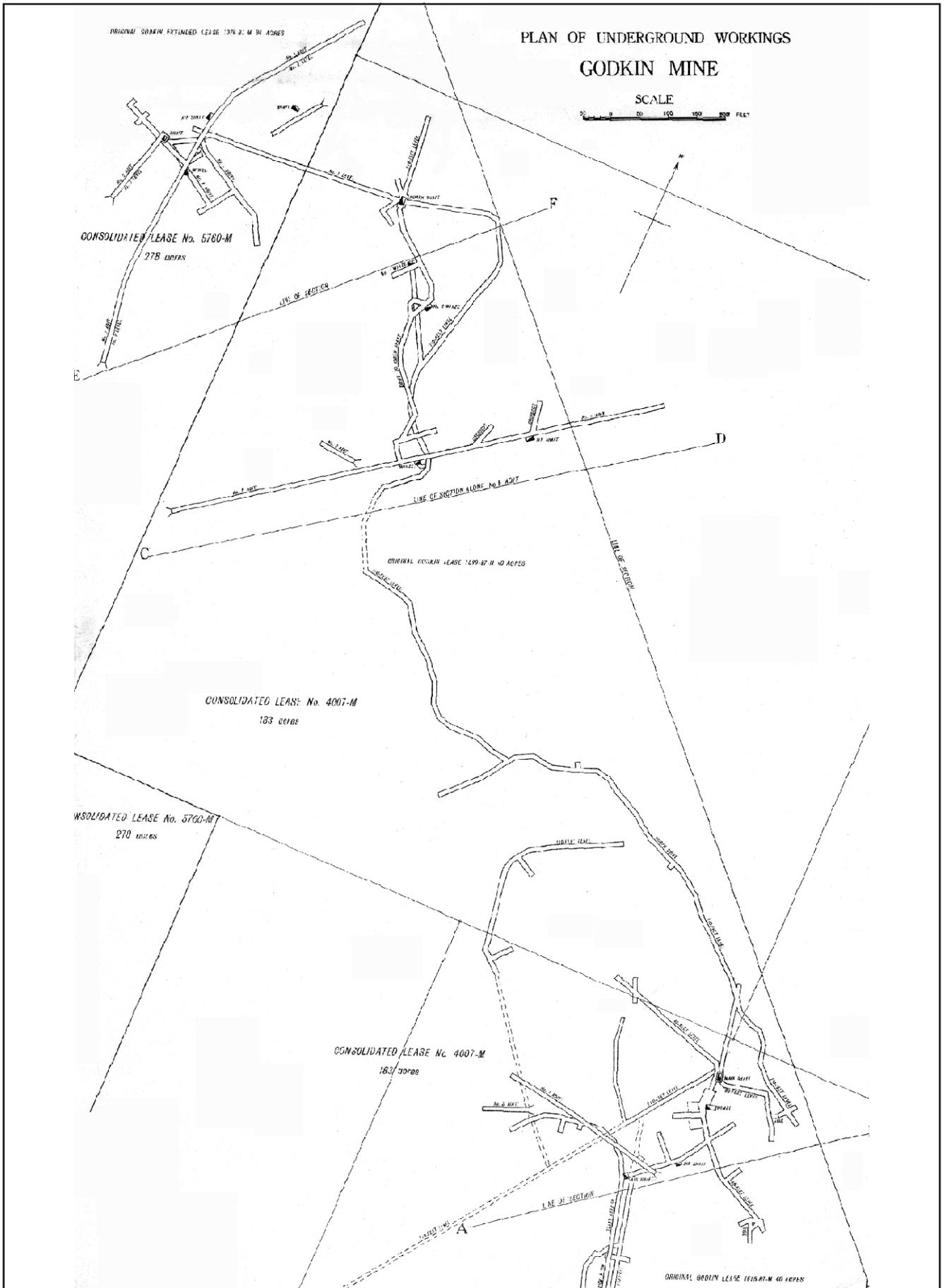


Plate 37

Plan showing underground workings and lease boundaries of both North Godkin and South Godkin workings by Nye in 1923 (MRT map 102A).