

**Archaeological Survey Report
2004/01**

**An archaeological inspection
of the Silver King main shaft
area at Zeehan**

By A. E. Webster



November 2004

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Introduction

Following a request for support from David Lane, President of the Zeehan Landcare Group, Mineral Resources Tasmania agreed to undertake an archaeological site survey of the Silver King mine site.

The purpose

The site is heavily infested with weeds including gorse, broom, crack willow, pampas and pines. The local Landcare group considers the site to be an eyesore and proposes to undertake weed removal and revegetation works with the aim of improving the aesthetics of the eastern approach to Zeehan.

Some acid mine drainage is generated within and adjacent to the site, including the tailings dump, and possibly from the internal drainage networks of the football ground and rugby pitch, which were constructed from slag and mine tailings derived from local sources and the Renison tin mine. The Landcare group plan to mitigate acid mine drainage in the Silver King area, possibly by putting a clay cap on the tailings dump and/or constructing a small wetland in the swampy area near the Henty Road. Crack willows occupying the drainage channel along the southern margin of the site are to be removed to improve drainage.

Because all of the proposed cleanup works will involve significant earthmoving and machinery use, there is a high potential for damage to the remaining historic features of the site, including the historic mining landscape. The survey was designed to identify and record the locations of all of the remaining heritage features visible at surface and to make recommendations about their protection during the proposed site works.

Location

The site is located on the eastern side of Zeehan, directly south of the Heemskirk Motel complex and near the intersection of the Henty (Strahan) Road (fig. 1). The mining infrastructure is clustered on a low

rise composed of outcropping pale grey siltstone and shale and site elements extend down the face of the rise and onto the flat areas surrounding it (fig. 2). Low-lying areas to the north and east are swampy and the southern margin is marked by a deep drainage channel that, while modern, was an original drainage line that is visible in photographs of the mine in its heyday. The southwestern side of the site is bounded by a modern football oval and a recently constructed (1990's) rugby pitch. The construction of these sporting facilities has destroyed or obscured any remaining historic features in this area. The surveyed area also includes the site of the former Silver King Oval (which was present on the low-lying flat adjacent to the Henty Road in the 1960's) and some concrete fragments found in this area may be modern (fig. 1, 2).

The South King (or Fahey's) workings are about one kilometre SSE, immediately north of the Zeehan Bell mine (fig. 4).

Methods

The surface area of the site was examined in detail and all features that were found were recorded by GPS, with significant features being recorded photographically. All information has been added to MRT's GIS heritage project for the Zeehan area. Site plans were compiled from GPS surveys (fig. 2).

Large stands of gorse cover several sections of the site and so this survey was not comprehensive. In particular, a stand of gorse along the northwestern margin of the low rise probably obscures significant parts of the concentrator site. A smaller patch of gorse and surficial debris obscures the red brick footings of a probable boiler site on the immediate southern side of the engine beds and a concrete wall footing was observed near the edge of the stand of gorse along the western side of the site.

There is a patina of surficial debris over much of the site that obscures most of the ground level features such as concrete wall footings and concrete (and possibly timber) flooring.

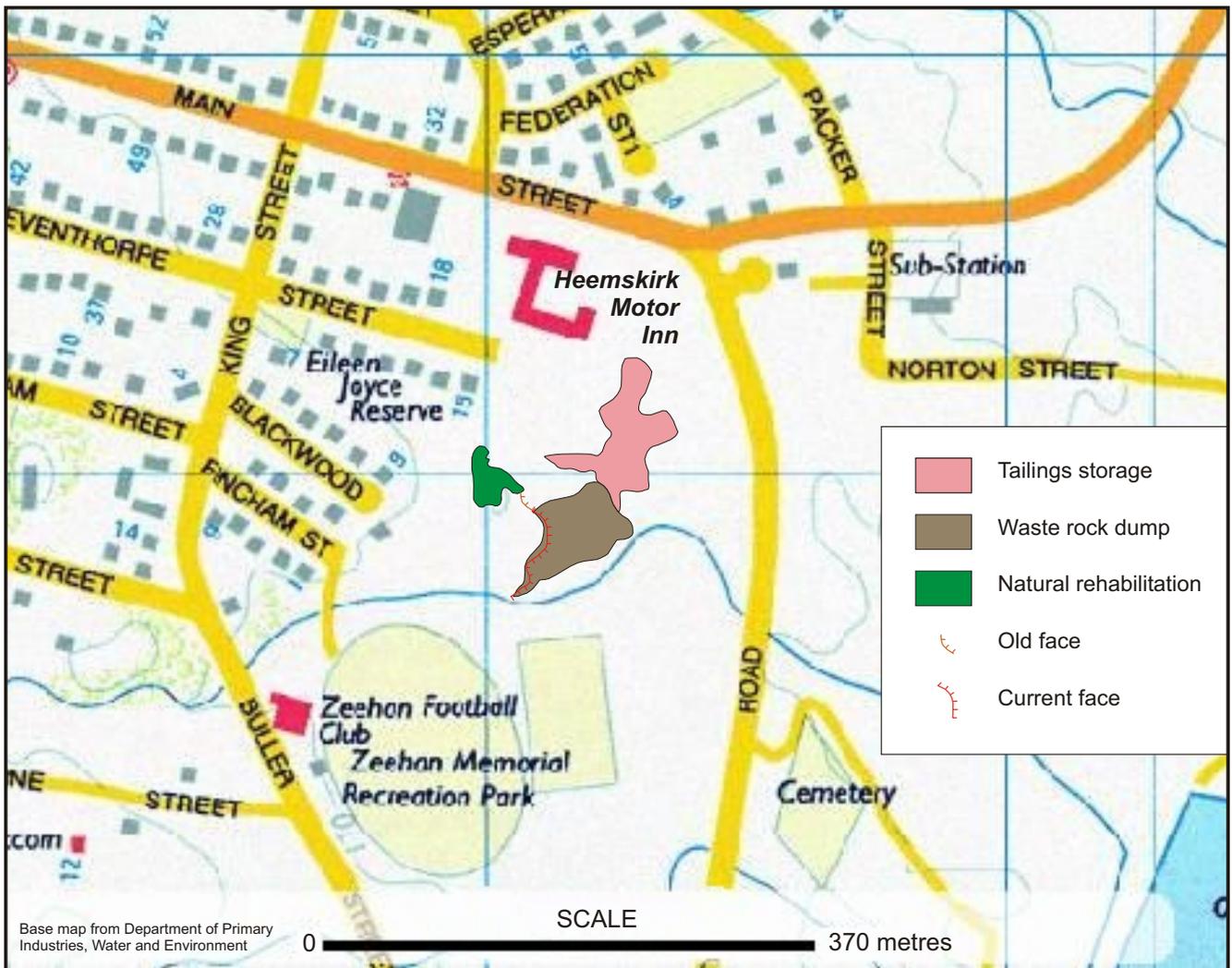


Figure 1
Location of Silver King mine site.

The Silver King Prospecting Association had a very large landholding on the southeastern side of Zeehan (fig. 3, 4). Several of the surrounding mine sites that are related to this company's operations were also visited. The Oonah stannite smelter was visited and recorded by GPS and photographically.

The survey was carried out on Thursday 31 July 2003.

Historic elements remaining at the site

Historic elements remaining at the site were all closely associated with the Silver King main shaft and include:

- the concrete footings of two steam-powered pumping/winder engines (forming the dominant historic element remaining at the site) (plates 1–6);
- a concrete-lined pump balance beam pit (now filled with debris) (plates 4, 6);
- the site of a small concentrator (which includes various concrete wall footings for buildings and other infrastructure and also some possible timber flooring exposed in places);
- the remains of a tailings dump;

- the remains of a mullock dump (which has been largely quarried away for road material);
- brick footings of a boiler;
- a shallow depression marking the location of the main shaft (which is back filled); and
- a historic mining landscape that can still be related to the historic period.

History of the site

Lease 223-87M of 80 acres, on which the main shaft was sunk, was first taken up by W. Strickland in 1887. Lease 222-87M of 40 acres, where the South King workings were later developed, was pegged by L. Susman in the same year (fig. 3). These and neighbouring sections were transferred in 1888 and 1889 to the Silver King Prospecting Association NL whose holdings totalled 352 acres southeast of Zeehan (Blissett, 1962). The company was floated on 500 £1 shares in 1887.

By 1888 there had been two discoveries on the lease, a strong lode and a ferruginous outcropping. These had been opened by 'surface cuttings' and an underlay shaft. Tetrahedrite-bearing lode had been traced by surface trenches for 2.5 chains. The Silver King's

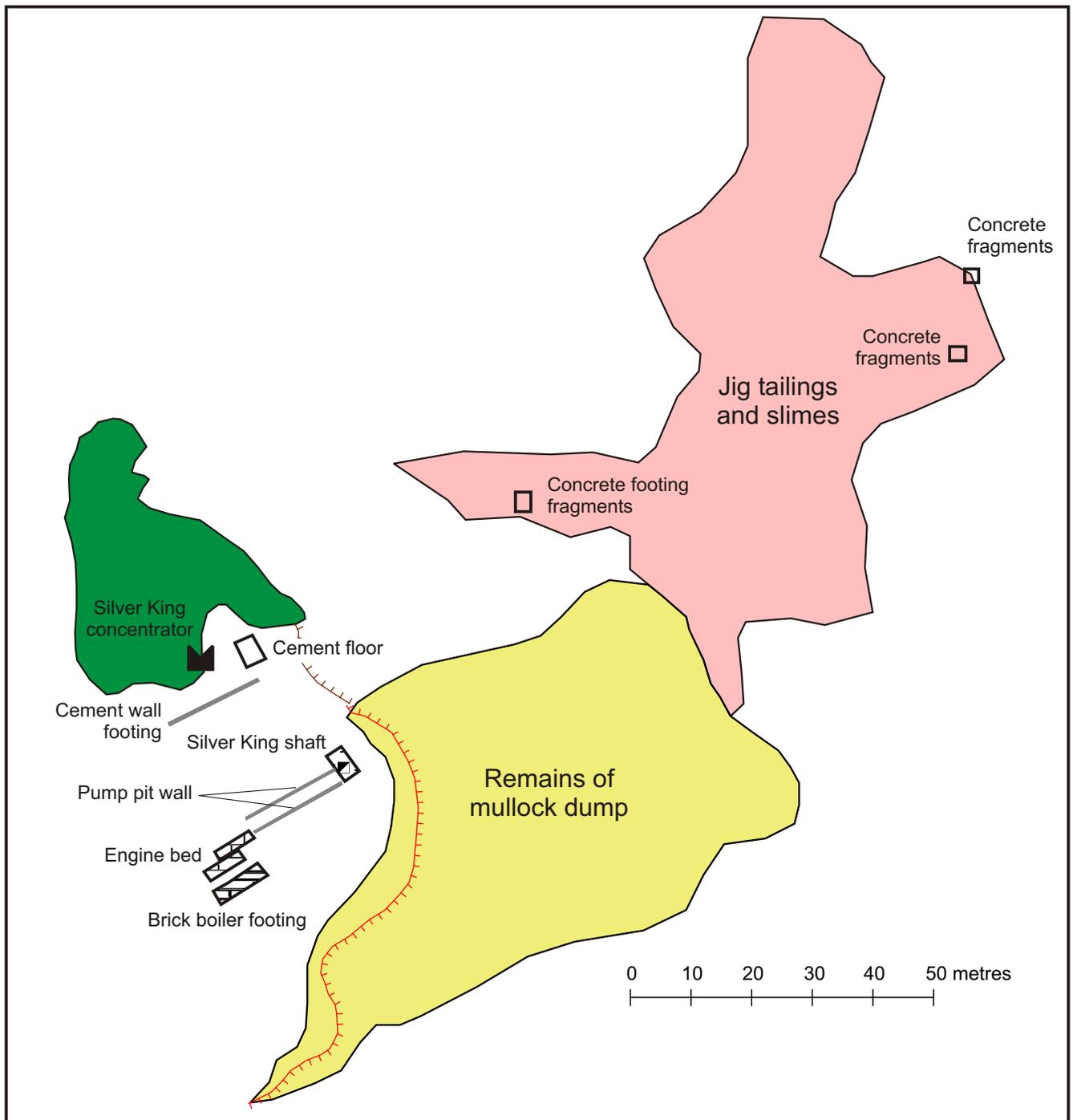


Figure 2. Silver King mine site.

principal shaft had been sunk to a depth of 14' (4.3 m) and a "splendid" lode of ore still showed in the bottom (Thureau, 1888). At surface the main lode was reported by Montgomery (1891) to strike NW with a SW dip, and to consist of galena and sphalerite in sideritic gangue up to 3 feet (1 m) wide. Shallow shafts were also sunk on No. 2 lode (200 m southwest of the main shaft) and on No. 3 lode (300 metres southwest of the main shaft) but operations here were discontinued because of flooding (Blissett, 1962).

By 1890 the company was erecting winding and pumping engines and sinking a main shaft on section 223/87 and this was a major focus of the company's energies. After great difficulties and expense the shaft

had almost been completed, and the machinery formally started by the time Montgomery wrote in January 1891 (Montgomery, 1891). Several small shafts and trenches had also been excavated on the surface outcrop of the lode (Inspector of Mines report, April 1890). In 1891, Mr Robert Evans ME (formerly manager of the Sunny Corner mine in NSW) was manager, and the main shaft had been sunk to 160' (48.7 m). The shaft had intersected two lodes and sinking was to continue to 232' (70 m) to open out a level. A 40' (12 m) shaft had also been sunk on No. 2 lode but heavy influx of water cause this work to cease. About 300 t of ore had been won to date, of which 50 t had been sent to Dry Creek (Tilley, 1891).

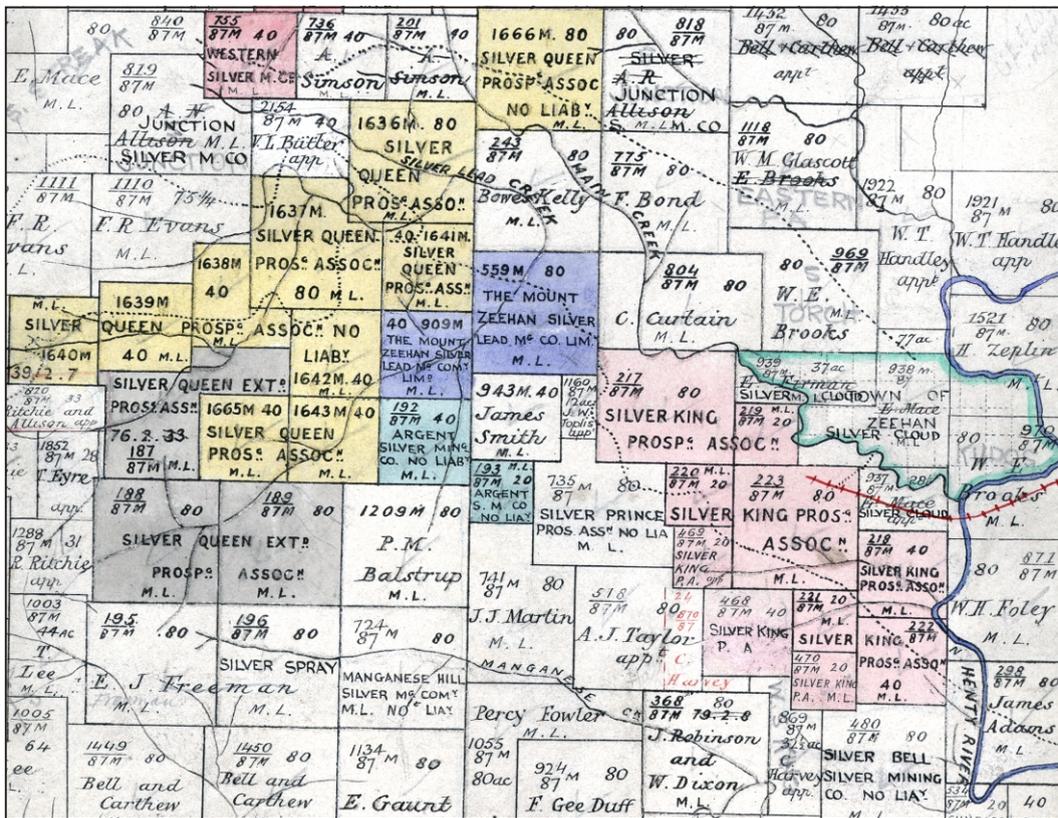


Figure 3

Lease chart of the Zeehan area showing the Silver King PA leases, c. 1903.

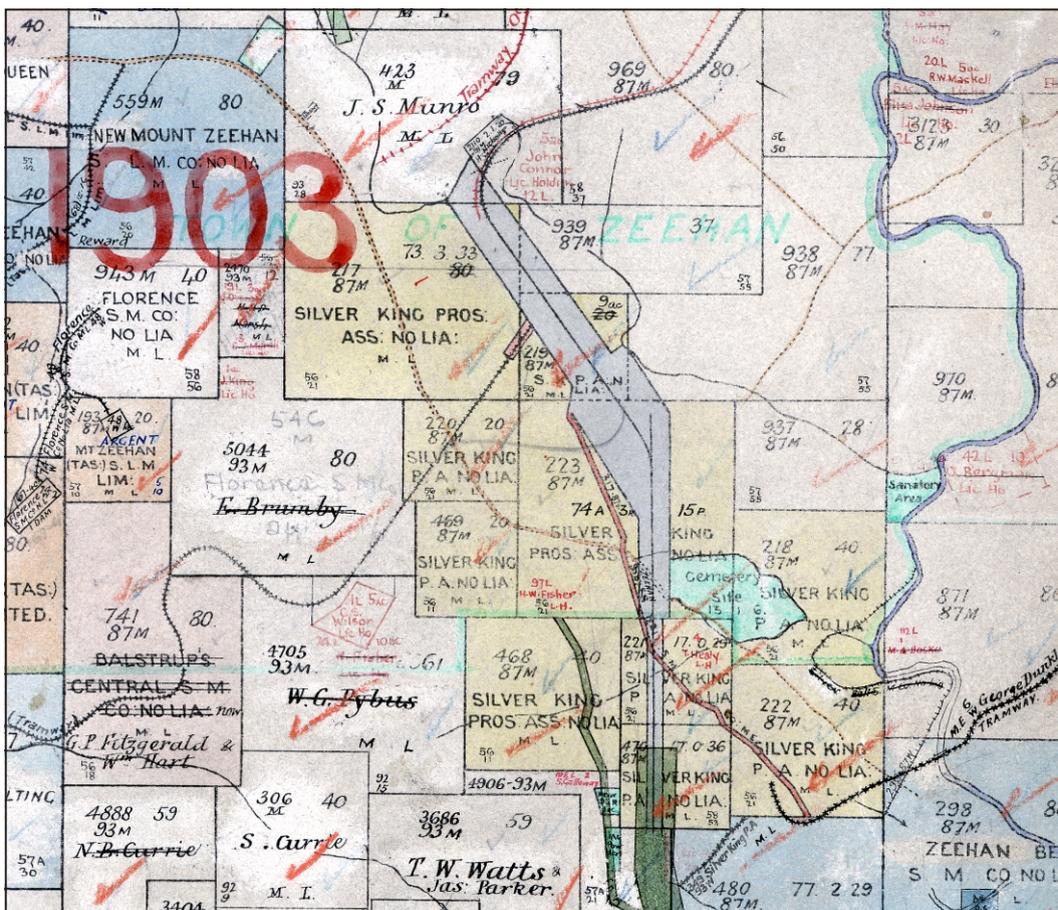


Figure 4

Close up view of mineral lease chart of Zeehan area showing the Silver King PA leases, c. 1903. This view gives some idea of the network of tramways and other infrastructure surrounding these leases. The old cemetery reserve is shown in bright blue (to the east of the leases).

In the 1892/1893 financial year, the company had commenced the construction of a mill by Messrs Parke and Lacy, of US and Sydney (plates 8, 10). It was to consist of (Secretary of Mines Report, 1892/1893):

- a stone breaker;
- rolls for crushing;
- jigs for treating the coarse crushed material; and
- Frue vanners for the sand and slimes.

In mid 1895, the workings on the main shaft had been shut down for "some time", apparently as a result of flooding, but although tribute parties were offering to work the company's leases (does this mean the main workings at the main shaft?), the owners were not willing to do this (Secretary for Mines, 1894/1895). They must have changed their minds, because by mid 1895, a tribute party was working at shallow levels on section 222-87M, close to the Silver Bell boundary, although they were encountering much foul air that prevented entrance to the workings (Secretary for Mines, 1894/1895). Initially the tribute was operated by Messrs Burridge and party and then later Messrs Fahey and party. They eventually discovered and mined a rich and extensive shoot of ore and this area developed into major workings that eclipsed the Silver King main shaft operations (Waller, 1904). From this period, around 1894/1895, the focus of work on the Silver King leases began to shift to the southern section.

In the 1895/1896 report, the Secretary for Mines was reporting that the whole property had been worked under tribute "for some time". A good deal of work was still being done at the main shaft and levels were opened on the 106' (32.3 m), 176' (53.6 m) and 246' (75 m) levels with considerable stoping on the two upper levels. The mill was operating for both the mine and "the public" (toll milling) but was in need of improvement (Secretary for Mines Report, 1895/1896).

Production was low in the 1896/1897 and 1897/1898 years and the Secretary for Mines recorded only minor tonnages being produced. Operations at the Silver King main shaft seem to have fallen away during this period and the tribute on the southern end of the Silver King leases, known as the South King or Fahey's Tribute, had become one of the principal producing mines of the field. It seems that during this two year period, the machinery at the Silver King main shaft was removed (was this installed at the Fahey's tribute?).

In 1899, the continuing success of the tribute parties (which had produced 4717 tons, valued at £59,215) induced the Silver King Company to renew their operations at the main shaft. To do this they had to purchase the plant of the McKimmie Silver Mining Co. at Dundas and were in the process of removing it to the mine (the Silver King) when the Secretary for Mines wrote his report. The removal and re-erection was expected to be completed within the next half year (Secretary for Mines Report, 1899/1900). The engine

beds that are present at the main shaft site probably date from this period and the reconstructed nature of the northern bed suggests that part of the original bed was utilised for the installation of this new machinery.

By 1900 the Silver King main shaft had been sunk to 248' (75.5 m) but the mine had again been closed. There was some optimism that the newly established Tasmanian Smelting Company smelter, which had recently got into "full swing", would provide a market for the second-class ore that had been left un-mined at the Silver King (Cyclopedia of Tasmania, 1900; Secretary for Mines Report, 1900/1901).

The new machinery that had been installed at the main shaft included (Cyclopedia of Tasmania, 1900) a 12" lift plunger pump fixed at the 176' (53.6 m) level and a draw lift for the remaining depth, a winding and pumping engine and a boiler.

The concentrating plant and ancillary buildings were still in place and consisted of Frue vanners in a 'substantial' building, and the other necessary buildings and offices. Output of the mine to 31 August 1899 was 4461 tons net, after concentration. There were large stocks of firewood and mining timber on the company's sections (Cyclopedia of Tasmania, 1900). It is the footings of these buildings that can still be seen adjacent to the engine beds at the site.

In 1900/1901, the Secretary for Mines reported that the South King (or Faheys tribute) was thriving on the south section of the Silver King's property and their main shaft was now down to 200' (60 m) and that a No. 3 level had been established. The South King tributors had erected concentrators to treat their "second class" ore. The tributors had also taken the adjacent Silver Bell lease on tribute. Despite the fact that 148 men were employed on this mine during 1901/1902, raising 2673 t of metal valued at £13,571 (all from the South King tribute), in workings down to stopes above No. 3 (258 foot) level, the work on the leases did not see out the year. There was no ore produced in the last few months of the year and the Secretary for Mines reported that Faheys tribute was now shut down.

In 1901/1902, the Secretary for Mines noted that the west cross cut was being driven 749' (228 m) to cut No. 3 west lode. It is not certain from this reference which shaft he is referring to and it might be either the Faheys tribute or the original main shaft. Blissett (1962) states that the exploratory cross cuts in the main workings intersected little workable ore and by the end of 1902 the mine closed down. It had certainly all come to an end by mid 1903 when the Secretary for Mines reported that work had been suspended "some time ago" and had not been resumed.

Three men on average were employed in surface prospecting on the Silver King leases during the latter half of 1903 and 26 tons of gossan and 20 tons of sulphides were produced for £210 value. Little other work took place (Secretary for Mines Report, half year ended 31/12/1903).

The concentrator at the Silver King main shaft site seems to have had a longer active life than the shaft. Waller (1904) reported that it was still an inefficient one and that the mine could not be worked successfully until capital for an efficient plant was provided. He also suggested that the mine needed to be worked on a larger scale to reduce pumping costs. The main workings of the mine were still considered to be those centred on the Silver King main shaft, with a second area of major workings on section 222-87M at the tribute area.

The decline continued through 1904 and although the Silver King leases were still listed as producers, "hardly anything" was happening and only 45 t of ore had been won for the last quarter (Secretary for Mines Report, 31/12/1904).

For 1905 and 1906 the leases were not listed amongst the active mines of the field and in 1907, the Secretary for Mines reported that the properties were still lying idle, except for a few tributors working on surface. In 1908 the leases produced 93 tons for £797 value (Secretary for Mines Report, 31/12/1908). From 1909, the leases were no longer listed as a producer (e.g. Secretary for Mines Report, 31/12/1909).

Leases were taken up in 1937 by C. MacDonald (11976M and 11977M) and J. H. S. Munro (11801M) but were relinquished in 1939 and 1940. In 1947, three boreholes were drilled by Zeehan Explorations below the main workings and another was put down near the South King workings but results were not encouraging (Blissett, 1962).

The richest ore shoots in the Silver King workings appear to have been worked out, although there may be considerable reserves of low-grade galena ore. The lack of an efficient milling and concentrating plant was an important factor in the failure of the mine, while inadequate pumping equipment prevented the exploration and development of the King main lode between the King and South King workings, and of No. 2 and No. 3 lodes (Blissett, 1962).

Geology

The host rocks are grey and green fossiliferous shale or slate, siltstone and pale grey sandstone forming the lower part of the Devonian Bell Shale, near the western limb of the Zeehan Syncline. The beds strike NW and dip steeply NE or are vertical (Blissett, 1962).

Ore bodies

The following account of the geology is taken from Blissett (1962), unless otherwise stated.

The ore bodies are fissure lodes trending northwest in a similar direction to the axis of the Zeehan Syncline, but with southwest dips. Galena occurs with sphalerite, pyrite and chalcopyrite in a gangue of siderite but as in other Zeehan mines, profitable ore is mainly concentrated in small and irregular shoots or masses and much of the lode material consists of relatively low grade milling ore. The silver content of

the galena averaged between about 25 and 36 ounces per ton in the main workings, and up to about 45 ounces per ton in the South King workings; it is therefore somewhat lower than in other Zeehan mines (Blissett, 1962).

Workings

The following account of the workings is taken from Blissett (1962), unless otherwise stated.

Silver King main shaft

The main shaft was sunk to 250 feet (76 m) and the mine was worked on No. 1 (106'; 32.3 m), No. 2 (176'; 53.6 m) and No. 3 (246'; 75 m) levels (fig. 7b, 8b).

No. 1 (106') level: Waller (1904) reported that the King main lode was driven on for 240' (73 m) north of the cross cut from the shaft and for 285' (87 m) south. The south drive continued a further 120' (36.5 m) south in barren ground east of the lode. A cross cut was driven westwards for 900' (275 m), recorded in error as an east cross cut by Waller (1904). At 250' (76 m) a lode carrying three feet of sphalerite and pyrite lying below gossan was driven on and stopped over a length of 50' (15 m). No. 2 lode was intersected at 634' (193 m) and consisted of seven feet (2.1 m) of siderite with a little galena. No. 3 lode was cut at 900' (275 m) and although 2 feet 6 inches (760 mm) wide was found to be barren.

No. 2 (176 foot) level: The main King lode was driven on for 140' (42.6 m) north of the crosscut and 400' (122 m) south. Waller noted that about 250' (76 m) had been stopped but a large quantity of second class ore had been left.

No. 3 (246 foot) level: The ore body was driven on for 130' (40 m) north and nearly 500' (152 m) south. According to Waller (1904), the lode turns westwards at the south end of the drive and is 20' (6 m) wide with disseminated galena throughout, and about 8 inches (200 mm) of galena in the hanging wall. The galena assayed 25 ounces of silver per ton and 70% to 75% lead.

South King (Faheys Tribute) workings

The following account of the workings is taken from Blissett (1962), unless otherwise stated.

The orebody was originally worked by Burrige and party from No. 1 level in the Zeehan Bell mine, the shoot being described by Waller as "one of the most massive bunches of galena, which have been mined in Zeehan". It ranged up to about 14' (4.3 m) wide and yielded 1882 tons of ore assaying about 45 ounces of silver per ton and 70% lead, but appeared to cut out against a fault near the Bell boundary. The lode was found south of the fault but is low grade.

About 1900, Fahey and party worked a large formation of gossan 122' (37 m) long, 400' (122 m) north of the Bell boundary. The gossan averaged 90 ounces of silver per ton and also yielded 25 tons of copper ore assaying 17% copper. At a depth of 30' (9 m) the body was 21' (6.4 m) wide but passed downwards into 4' (1.2 m) of

galena assaying 100 ounces of silver per ton, which continued to a depth of 90' 27 m). Waller (1904) suggested that the ore body pitches south to join that worked by Burrige and party. The South King main shaft reached a depth of 258' (78.6 m). At 100' (30 m), a cross cut was driven east, intersecting first the main lode and then a small but rich lode (the Sunrise lode) in the 258' level. The main orebody was relatively poor but was workable in stopes above the level. Fahey and party produced 7488 tons of ore between the surface and the stopes above the 258' (78.6 m) level.

Miscellaneous workings

The following account is taken from Blissett (1962), unless otherwise stated.

About 1890, and again in 1907, shallow shafts were sunk on the No. 2 and No. 3 lodes but work was short lived because of flooding. The lodes appear to be of relatively low grade. Water also prevented deeper sinking in a pit excavated in 1904 on the line of the King main lode about 700' (210 m) south of the Silver King main shaft.

Production

Recorded production is 11,336 tons of ore, of which at least 9370 tons was extracted from the South King workings. Metal content is estimated at about 5000 tons of lead and 350,000 ounces of silver, as well as about four tons of copper (Blissett, 1962).

Silver King Extended Prospect

The following account is taken from Blissett (1962), unless otherwise stated.

The property formerly consisted of lease 804-87M of 80 acres which was pegged in 1888 by C. Curtain and transferred to the Silver King Extended Silver Mining Company NL in 1889. The prospect lies SSE of the old Despatch mine and the western portion of the lease included part of the township of Zeehan north of Wilson Street and southeast of Frederick Street. Two NW-trending lodes were explored in shallow shafts, costeans and adits but inflow of water presented a problem. Little development took place and the lease became void in 1893. In subsequent years, the lease was taken up a number of times without much success and is of insignificant economic value. Mineralisation occurred within Ordovician Gordon Limestone which is faulted to the west against shattered Devonian Bell Shale. Tilley (1891) quoted assays ranging from about 40% to 50% lead and 35 to 80 ounces of silver per ton, but no production has been recorded.

Site descriptions and recommendations

Mining landscape

The surroundings of the Silver King main shaft site have been heavily modified by the development of the sports ground complex, urban development, motel development and the Strahan (Henty) road (fig. 1).

Despite these impacts, there are still enough remnants of the historic infrastructure to relate the current landforms to that of the original mining landscape when the mine was operating (fig. 2; plates 7-10). The removal of the waste dump and tailings material has returned the site to a condition that differs little from that seen in photographs held by the Zeehan Museum depicting the mine in c. 1897 and c. 1900, so the removal of this material has affected the heritage value of the site less than it otherwise may have done (plates 7-10).

Silver King main shaft, engine beds, mullock dumps and tailings

The Silver King main shaft is located on a low rise composed of pale grey siltstone and shale and some dark grey shale (plates 7-10). The dominant feature of the site is two large, formed concrete pumping/winding engine beds on the crest of the low hill, which appear to have been the foundations for a large single-cylinder horizontal steam engine and pumping plant (at least in the final stage of the shaft's working life) (plates 1, 2). The northern bed is the larger of the two and appears to have been largely reconstructed at some stage, possibly for the installation of second-hand machinery in 1899. Associated with the engine beds is a pump beam pit (between the beds and the shaft) which is back filled with debris. This was the site of the foundations of the pivot mechanism (quadrants) which transferred the horizontal motion of the horizontal engine to the vertical motion of the 12" plunger pumps installed on the 176' (53.6 m) Level. If this pit was cleared of debris, mountings for the pivot arms might be found. The main shaft has been filled in but may be hung up at depth. It may subside further in the future.

The engine beds are in very good condition and are extremely robust structures. They will require very little management. Clearing of any superficial debris in the vicinity of the engine beds, pressure receiver brick footings, concentrator footing, shaft or pump pit should be done with extreme care so that none of the remaining infrastructure is damaged.

Boiler beds

Remains of infrastructure features lie beneath the gorse and broom infestations. The ground-level brick base of at least one boiler (or pressure receiver) lies adjacent to the southern side of the pumping engine beds (almost completely overgrown with gorse). This type of feature, mostly covered in gorse, is likely to be uncovered in any place where weed infestations are removed. Special care must be taken to avoid damage of features that may be exposed as weeds are removed by machinery. All weed removal should be closely supervised by someone with archaeological training.

Mullock and tailings dumps

A mullock dump has been built up and outwards from the shaft brace level, over the bank and outwards to the

low-lying swampy area to the east of the shaft. The lowest areas of the swampy ground are covered in a thick deposit of concentrator slimes at the base, with a cover of coarser jig tailings (fig. 2). The mine mullock dumps were probably built up from timber trestles extending eastwards from the sky shaft of the head frame (plate 8).

The mullock and jig tailings dumps have been heavily impacted by removal of material (for road making?) and are effectively destroyed. The modern removal of the mullock dumps has returned the contours of the site to a condition that resembles that which existed when the mine was first developed and which is seen in early photographs. Jig tailings and waste dump rock (often containing sulphide minerals such as galena) has been removed over many years, apparently by the local council.

Specific recommendations mining landscape – mullock dump

The area of jig tailings in the low wet area on the eastern side of the site has been heavily modified by a number of subsequent developments. A 1960's era football ground was once in place adjacent to the Strahan (Henty) Road (David Lane, pers. comm., July 2003). This is now long gone and there is little evidence remaining. The local council has removed gravel over many years, and there have been various drains and other water management works that have been carried out across the tailings flat. These works were probably to improve the drainage of this low-lying area, which seems to have always been a wet area (there is a corded road to the mine site seen in the 1897 photo, Plate 10).

There is little heritage value remaining in this area and clay capping, drainage works and the development of wetland areas can go ahead. However, wet areas such as this have a high potential to preserve organic materials such as wood, so care should be taken during all excavation works to identify any heritage features (such as remains of the corded road) that may be exposed.

No further reshaping of the main mullock dump should take place, despite its present heavily modified nature. The current form of the dump has been produced by subsequent use and, by coincidence, has returned the site to a form that is recorded in contemporary photographs from c. 1897 to 1900. It should remain as it is and the gorse and broom should be removed with care.

The remains of ancillary buildings (such as the office building) may be encountered during any weed clearance and it is possible that gorse may be preferentially established on the former sites of structures.

Concentrator site

The site of the concentrator is located on the northern side of the low rise where the engine beds and shaft are located. Extensive wall footings and other evidence of structures are observed on the edge of the gorse. The site is heavily overgrown by gorse and some broom and there is very little of the ground surface that can be examined.

Contemporary photographs show that there was at least one major building and a large timber ore hopper connected to the shaft head frame by a timber trestle. Concrete wall footings of these structures are visible, as is an area of concrete floor. Other features observed that relate to this plant complex include:

- the rock cut embankment excavated into the low mudstone/shale hill (on which the mine was built);
- occasional timbers (possibly flooring or structural timbers) on the lower slopes of the rise, that are partially buried in places; and
- rare brick fragments.

The concentrator site has the greatest potential to contain structural remains, and gorse removal and debris clearing should be undertaken with extreme care. It is highly likely that further remains of concentrator buildings will be exposed as the gorse is removed.

These rare features suggest that there are heritage features, artefacts and structural elements lying below the gorse and these will probably be uncovered as the weeds are removed. Excavation should proceed with extreme care to ensure that any remains are not disturbed.

The shaft is back filled, through slumping, and may not be secure at depth. Fencing should be considered.

Conclusion

The Silver King main shaft site preserves a surprising amount of physical evidence of the mining and treatment infrastructure of a late 19th Century silver mine. It also preserves a mining landscape that still closely represents that which was present when the mine was in production.

While the Silver King mine was never a major ore producer, it was acknowledged as being one of the 'oldest' mines of the field by contemporary writers. Apart from the extensive physical remains that are still present at the site, it also shows that no matter how insignificant a Zeehan mine site may seem, it may still have a good story to tell.

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[1 November 2004]



Plate 1

View of the top of the main (northern) concrete engine bed at the Silver King main shaft site. It is uncertain whether this bed mounted an engine, part of the engine, or a component of the pumping mechanism. The latter is considered most likely. Heemskirk Motel in background.



Plate 2

View of the top of the smaller (southern) concrete engine bed at the Silver King main shaft site. This bed probably formed the mounting for a single cylinder horizontal steam engine, which powered the pumping mechanism. There does not seem to be any provision for winding gear on these beds and it is possible that the shaft was used only for mine pumping in the final stages of its life.



Plate 3

*The main concrete engine bed at the Silver King main shaft. The backfilled, concrete-lined balance beam pit is immediately in front of the bed. The shaft collar is to the left of view.
Note the engine mounting bolts in the top of the bed.*



Plate 4

The shaft collar is located in the clump of scrub in the middle ground. The backfilled, concrete-lined balance beam pit is immediately in front of the engine bed.



Plate 5

Panorama view of the Silver King main shaft site from the southeast, showing the engine beds (left), backfilled pump beam pit (centre) and the shaft collar (shallow scrubby depression on right). The concentrator site is located in the patchy gorse in the right rear.



Plate 6

The backfilled, concrete-lined balance beam pit immediately in front of the northern engine bed. This view is taken from on top of the engine bed, looking down.



Plate 7

View of the Silver King mine site taken from the rugby pitch located to the south of the site (looking approximately north). This view is taken from approximately the same location as Plate 8).

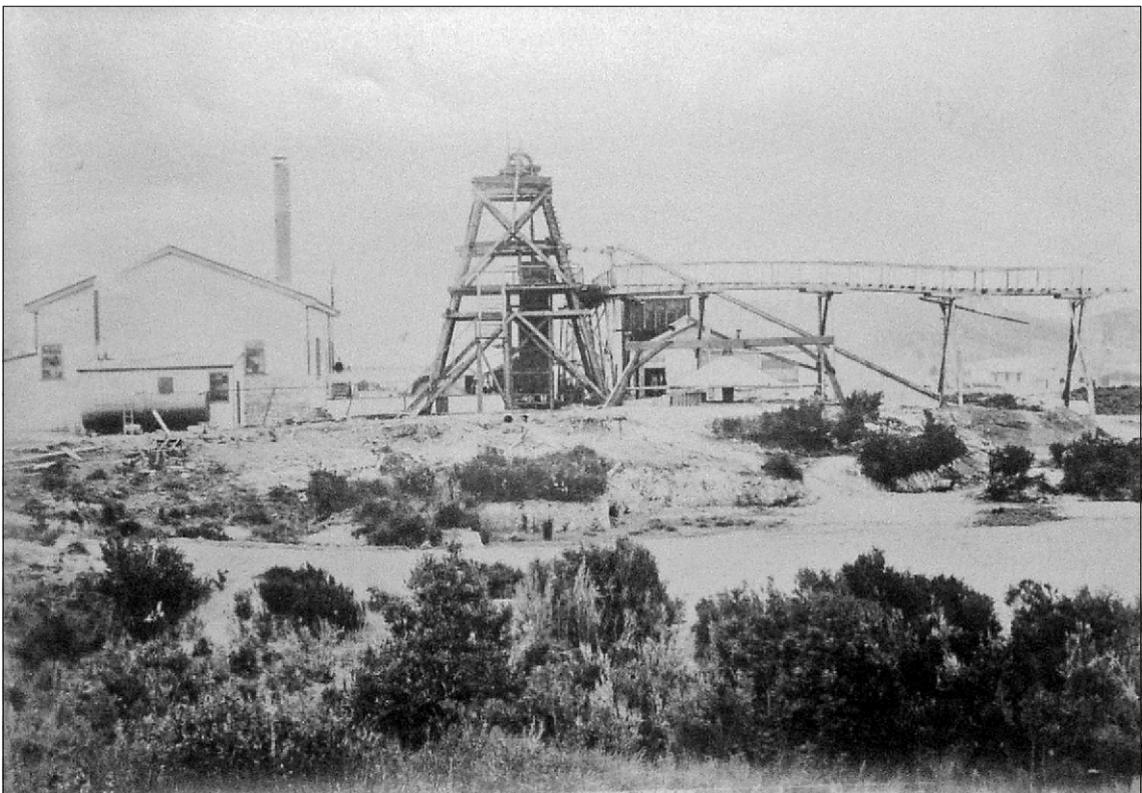


Plate 8

View of the Silver King mine surface infrastructure showing the head frame, mullock tip trestle and winder/boiler house. This view is taken from approximately the same position as Plate 7. Note the concentrator hopper behind the head frame.



Plate 9

Panorama of the Silver King mine site, taken from near the intersection of the Zeehan Highway and Henty Road. The site lies to the southwest of this intersection. The view approximates that seen in the historic photo shown in Plate 10. The yellow square outlines the approximate location of Plate 10.



Plate 10

Historic photo of the Silver King mine, taken from a road located in the low flat and swampy area that is now occupied by jig tailings. Note the corded road. The yellow square on Plate 9 outlines the approximate location of this photo. The face of the low bank has since been modified during mullock dump quarrying.



Plate 11

Brick footings of boiler, or possibly the pressure receiver of the steam plant of the Silver King Main shaft site. The brick footings lie at the base of the southern engine bed and are largely obscured by gorse.



Plate 12

View looking north showing the relationship between the brick footings of a boiler (or possible pressure receiver) of the steam plant of the Silver King Main shaft site. The brick footings lie at the base of the southern engine bed and are largely obscured by gorse. The Magellan GPS receiver in the centre of the view is approximately 170 mm long.