Name: Carn Brea Tin Mine
Status: Provisionally Registered
Municipality: West Coast Council

Setting:
The Carn Brea Tin Mine is on a tributary of Granite Creek about half way between Trial Harbour and Granville Harbour in the Heemskirk mining field on the west coast of Tasmania. A track cut along this coast by Aboriginal people and later maintained by prospectors and drovers was formalised c1880 as Climie's Track. Today that track is sometimes used by mountain bikers, quad bikers and hikers, but the remote mine site is 200 metres from the track, not visible from it and rarely visited. This is an exposed coastal area characterised by cold winters, driving rain, dense vegetation and steep terrain. The site is covered with thick regrowth scrub characteristic of a former mining site which was cleared of timber for mining props and then kept open by burning. The re-growth vegetation is predominantly wind-bent tea-tree. The site is within a kilometre of the coast and the sound of waves breaking on the shore is audible at the mine.

Description:
The site consists of an approx. 25-metre-long adit driven into the bank of the creek, a well-preserved five-head battery (approx. 344039E, 5362058N), the remains of a 24-feet-diameter waterwheel (approx. 344045E, 5362074N), a quarry 60 metres from the battery site, the remains of a dam, some iron work under rocks in the creek bed, a flume bench and some ring gear, and a wheel pit cut into the rock of the creek bank (Whitham 2002, p.44). The site may also have included a hut, a blacksmith's shop and perhaps an ore shed, while remnant tin dressing appliances such as biddles (sieves), vegetable garden and refuse area may also be obscured by scrub. All these identified and potential features are included in the registered area. Contemporary reports of the mine describe a ten-head battery being brought to the site, where a five-head battery stands today. Therefore it is possible that the present battery is not the original.

History:
In 1878, after leading an exploratory party into the Mount Heemskirk region in western Tasmania, government surveyor Charles Sprent spruikied the future of tin mining in this district. He described 'beds of iron conglomerate something resembling the famous "brown face" of Mount Bischoff', the nearby large tin mine which had just paid its first few dividends (Sprent 1878, p.5). There was a rush to exploit the supposed 'second Mount Bischoff', with 6400 hectares being pegged and more than 50 companies formed, 'some of whom were tricked into buying leases on the beach or under the seal' (Roberts 2007, p.113).

The Heemskirk alluvial tin boom soon collapsed. However, a Heemskirk lode tin mining boom followed Inspector of Mines Gustav Thureau's poorly considered claim that the importance and permanence of the Heemskirk tin deposits had 'already been proved'... (Thureau 1882, p.27) Premature statements of this kind, including comparisons with Cornish tin mines made by Cornish miners anxious to secure work and financial backing, played a big part in the disastrous Heemskirk tin boom of 1881–84.
Cornwall had been the centre of English tin mining for about 3000 years and by the eighteenth century, Cornishmen were firmly established as the world’s preeminent hard rock miners. During the mid-to-late-nineteenth-century Cornish ‘diaspora’, in which Cornish mining expertise was spread across the world, enclaves of Cornish mining families were established in places with hard-rock-mining industries like the Moonta-Kadina-Wallaroo ‘Copper Triangle’ in South Australia and Hidalgo State in Mexico (Schwartz 2011). Emigrant Cornish miners ‘asserted an innate superiority as hard-rock miners’, exploiting their Cornish ethnicity as an economic strategy (Payton 2004, p.234; James 1994, p.234).

When tin mining began in Tasmania in the 1870s, the local mining community subscribed to the idea that Cornishmen were the model of practical, economical tin mining. Cornish tin dressers and miners such as WH Wesley (Mount Zeehan Silver Mine and Anchor Tin Mine), Richard Mitchell (Anchor Tin Mine) and John Craze (Zeehan Montana and Round Hill Silver Mines) managed large Tasmanian mines, but as was demonstrated on the north-eastern tin fields. Cornish miners were prone to predict that unproven Tasmanian tin deposits would continue at depth as they often did in Cornwall, leading to disastrous attempts at lode mining (Ireland 1915?, p.68). While qualified engineer Ferd Kayser had been placed in charge of the Mount Bischoff Tin Mine as the first of Tasmania’s professional mining engineers, trained-on-the-job Cornish miners were in great demand at Heemskirk, and they encouraged their excited employers with overly optimistic comparisons of the Tasmanian mining field to the rich deposits of their homeland. In August 1881, for example, one of the Heemskirk mine managers, Robert Hope Carlisle, was said to be trying to trace the continuation of the famous Dolcoath tin lode from Cornwall across the oceans to Heemskirk (‘Mt Heemskirk’ 1881).

As in north-eastern Tasmania, Cornishmen asserted that Heemskirk tin deposits would continue at depth like Cornish ones, but they were actually small and inconsistent. Reliance on this ‘intuitive’ Cornish mining knowledge rather than local geological investigations proved disastrous, leading to the increasing reliance on professional mining engineers like Kayser.

**Josiah Thomas Rabling and the Carn Brea Tin Mine**

Ironically, the fortunes of one novice Cornish miner, Josiah Thomas (JT) Rabling, in Tasmania suggest that Heemskirk was indeed the ‘Corn of the antipodes’, that is, it proved as hard to make a living on the Tasmanian tin fields as it was in the depressed Cornwall he had escaped. Rabling was a Cornishman chosen by the Hobart-based British Lion Prospecting Association to work the Carn Brea Tin Mine at Heemskirk. There were many Cornish miners in Tasmania at the time, including some on the Mount Bischoff tin field and at the Beaconsfield gold mines, yet Rabling appears to have been one of only two Cornish recruits to the field selected from within Tasmania. He was born into a well-known Camborne, Cornwall mining family in about 1843, the fourth of eight children (English Census 1861). As the nephew of William Rabling senior, who had made his name and fortune in the Mexican silver mines, and also the nephew of Charles Thomas, manager of the famous Dolcoath Mine at Camborne, he was born with a mining pedigree (‘Miss Eliza Rabling’ 1889; Schwartz 2011, pp.51–52). Josiah’s father, Henry Rabling, mined in Mexico, but does not appear to have succeeded there, leaving effects to the value of less than £450 when he died in 1875 (England and Wales Probate Calendar). The fact that Josiah Rabling was in the workforce at the age of seventeen suggests that his mining education was on the job, rather than in the class room—and there was no Camborne School of Mines until 1888. Rabling grew up at a time when England lagged behind countries like Germany and the United States of America in not having a mining academy system (Home 1995, pp.7–11, 17). In 1861 young Rabling was a smith, in 1871 he was a mining clerk at Camborne, near the Great Flat Lode of tin mines and the Dolcoath Mine, which had produced copper and tin for centuries (English Census 1871).

The Great Flat Lode became one of Cornwall’s greatest tin producers (Buckley 2005, p.140). However, the crash of the copper price in the second half of the nineteenth century, the effect on its economy of the cost book system and Cornwall’s lack of a coal resource, and additional failures in agriculture and fishing, placed great stress on Cornish mine workers and labouring families. (The cost book system of mining operation, peculiar to Cornwall, was characterised by a ‘almost perpetual state of capital shortage’. Causes of this included unlimited liability, which discouraged large-scale investment, and frequent distribution of profits at the expense of a reserve fund, which made it difficult for a mining company to deal with price falls. [Burke and Richardson 1981, p.4]) By 1873 the tin price was also falling, and 132 Cornish tin mines closed over the next three years (Payton 2004, pp.215–20). It is likely that the death of Rabling’s father in 1875 and the downturn in the local mining industry necessitated a search for work elsewhere. Competition with Cornwall from the Australian tin mines had begun with almost simultaneous discoveries on the New England tableland in northern New South Wales and at Mount Bischoff in Tasmania. Rabling arrived in Tasmania on the Argyle in 1876, perhaps being sent by British capitalists interested in Tasmanian mines (‘Gold news’ 1877). During 1877 and 1878 he secured commissions to report on various mines, but by the following year was down on his luck. In August 1879, after making a little money by paling splitting, he forged a signature on a cheque which he presented in the town of Waratah (Mount Bischoff) to pay a small cartage fee incurred by a friend. He pleaded guilty to a crime committed in ‘such a childish manner’. according to a reporter for the Mercury newspaper, ‘with so little gain attached to it that it really looked as if he wanted to get into prison’ (‘Our
Despite this being a first offence, Rabling was sentenced to twelve months' imprisonment (CON37/1/11, p.6063). The effects of this experience are unknown, but one subsequent effort to make a living in Tasmania also landed him in trouble. In July 1881, along with three other men, he was tried in the Supreme Court, Hobart, on a charge of unlawfully conspiring to defraud Peter McIntyre to the tune of £400 by salting a mine. Rabling and one other were found not guilty (‘Second court’ 1881). Despite these events, such was the allure of the Cornish ‘practical miner’ that only a month later Rabling was one of two men engaged to prospect on the Heemskirk tin field (‘Mining’ 1881). The Heemskirk tin deposits, like those of Mount Bischoff, occurred in granite—and who knew more about working tin in granite than Cornishmen?

Rabling leased three sections, one near Granite Creek, before he reported back to the British Lion shareholders in April 1882. The creek that served the section, he said, would be sufficient to drive machinery (‘Mining’ 1882). Even today the site is remote, requiring several hours’ walk from shack settlements at Trial Harbour and Granville Harbour. As Thureau discovered, when he arrived on the Heemskirk field unwisely in winter, the difficulties of working the remote field were enormous. It was an exposed coastal area characterised by cold winters, driving rain, dense vegetation and steep terrain. There were no roads, and no useful supply routes. The closest thing to a port was Trial Harbour, a shallow inlet open to the winds which crashed the Southern Ocean onto the coast.

Accessing the Heemskirk field was an endurance test. Rabling first ventured westward out of Launceston on the small steamer the ss Amy, which served Trial Harbour (‘Tin’ 1881). Seventeen passengers plus stores for the Pieman River goldfield were crammed aboard the tiny vessel, which took on further stores at Latrobe on the Mersey River during a five-day stopover. When the Amy got underway again, overloading had made it so unsteady that the bulk of the cargo had to be put ashore at the Mersey heads. Another layover occurred at the port of Stanley, in the far north-west, this time for bad weather. On the seventh day out of Launceston the steamer put in at the remote sheep and cattle station of Woolnorth, on the north-western tip, again delayed by buffeting winds. The Pieman River heads were reached ten days out from Launceston. Luckily the dreaded bar here was passable for the first time in many days, but more days were lost at Corinna before passengers re-embarked for Trial Harbour. (‘The West Coast goldfields’ 1881).

Meanwhile, directors of the Heemskirk tin mines had the luxury of choosing from the wide selection of Cornish miners available in the Australian colonies. The Prince George Mine appointed as its manager a supposed Cornish miner, John Addis (he was actually born in Gloucestershire). He promptly declared that ‘with a careful and judicious outlay of capital, Heemskirk will be the Cornwall of the antipodes’ (‘Mount Heemskirk’ 1881 and 1882). The St Clair Tin Mining Co chose James Henry Nance, another Cornishman, from 24 applicants (‘Tin’ 1882a; ‘Mining’ 1882). William Williams was appointed the third mining manager of the Cliff Company, bringing to the job experience as a mining manager and engineer in tin lode mines in Cornwall and Queensland (‘Tin’ 1882b). John Williams, first manager of the Orient Mine, was a Cornishman, as was Thomas S. Williams, the mine’s third successive manager, a pious man who conducted religious services and established a chapel/reading room on his lease (editorial 1902; ‘Church held in a stable’ 1937). Edwin Tremethick and Edward Perrow took their turn at the Heemskirk River and Cliff Mines respectively. Cornish-born miner Abraham Shortland Rawlings (ASR) Osborne, a native of Marazion, was already on hand at Mount Bischoff. In October 1881 he wrote from the West Cumberland Mine that the Heemskirk tin field displayed ‘grand indications and already magnificent shows proved (partially, however) all are fully sanguine of a great future …’ (Osborne 1881). Ten months later, WG Hensley, the Cornish manager of the Champion Company Mine, reported that his property ‘equals, even if it does not outrival, the “Great Dolcoath”’ (‘Enquirer’ 1882). Similar predictions and comparisons had been levelled at the Mount Bischoff Mine during its infancy—and since January 1878 it had been fulfilling them by paying monotonously regular dividends (Smith 1876). It was assumed that Heemskirk would follow suit.

The pressure to join this Cornish chorus must have been strong. Shareholders in the British Lion Prospecting Association floated the Carn Brea Tin Mining Company, which in January 1883 appointed Rabling mine manager. He promptly adjourned to the West Coast with eight assistants. While publicly, at least, Rabling made no grandiose comparisons with the Cornish tin field, he did name the mine Carn Brea, after the hill that stands over his home town, Camborne, in Cornwall, perhaps a reflection of homesickness as well as an assurance of worth to cheer the shareholders.

**Water power**

All the 1880s mines on the Heemskirk tin field, including the Carn Brea, were water powered. A typical set-up at such a mine consisted of running water from a stream being used to turn a waterwheel. A drive belt connected the waterwheel to the camshaft of a stamper battery, raising and dropping the heavy stamper rods to crush the tin-bearing rock. The noise of an operating battery was almost deafening. The crushed material would then have been subjected to a refining process, using water to separate the heavier cassiterite (tin ore) from the host rock. Rabling installed a type of concave sieve known as a buddle (Cornish buddle/Munday’s or Borlase’s buddle), which was commonly used for this purpose in tin mining plants.
managed by Cornishmen on the Heemskirk field (Jones 1883, p.3; Thureau 1884, p.1; ‘South Heemskirk tin mine’ 1928).

The use of water power was emblematic of nineteenth-century and early-twentieth-century mining in western Tasmania, one of the wettest mining fields in Australia (The Russell River goldfield in northern Queensland was probably the wettest; the nearby town of Babinda has an average rainfall of 4279.4 mm, almost double that of Queenstown, 2408.2 mm and Waratah, 2169.5 mm, on Tasmania’s West Coast). Water was pivotal to the separation of ore from detritus by panning, cradling, sluicing and dredging, as well as in the driving of machinery. As Geoffrey Blainey suggested (Blainey 2003, p.209), the Mount Bischoff tin mine in western Tasmania possibly made more use of water power than any other Australian mine—and there were plenty more like it nearby. Mining plants were driven by Pelton wheels (for example, in the early operation of the Magnet silver-lead mine and at the Cleveland tin mine), waterwheels (such as those used at Mount Bischoff, the West Bischoff, the Specimen Reef, Princess and King King gold mines as well as at the Heemskirk tin mines) and hydro-electric power stations (Mount Bischoff, Mount Lyell copper mine, Federation tin mine and the later operation at Magnet). The second phase of the Pieman River goldfield, the hydraulic craze in the years 1894–98, was another expression of water’s ubiquity on the West Coast, with long races being cut in order to blast the high gold-bearing terraces at high pressure. However, few relatively intact examples have survived of mines which used water directly for motive power, like the Carn Brea.

Geoffrey Blainey (1993, p.44) has described how the installation of machinery before a mine was proven was ‘almost a first commandment in Tasmanian mining’ during the late nineteenth century. So it was at the Carn Brea. In February 1883 the shareholders authorised a loan to pay for a battery and a 24-foot iron overshot waterwheel manufactured at WH Knight’s Phoenix Foundry in Launceston (‘Heemskirk’ 1883; ‘Tin’ 1883). A road had to be built to North Heemskirk before the equipment was delivered by steamer at the dangerously exposed port of Trial Harbour (‘Mount Heemskirk’ 1883). However, when the machinery came to be hauled up the road by horse team the carters ran out of horse feed, causing further delay (‘Managers’ reports’ 1883). When visiting the Carn Brea Mine, the *Mercury* newspaper’s ‘special’ reporter Theophilus Jones was only able to inspect the stone cutting and wheel pit prepared for its reception, Rabling’s 84-foot drive and 20-foot winze (internal shaft) and a lode said to be four to five feet wide. Jones was reassured by the manager serving him steaming Royal Blend tea, preserved meat and ‘excellent’ bread and butter. Ignoring the premature purchase of the battery, Jones praised Rabling for his economy, since he had:

*pitched his camp in a snug corner formed by the junction of two banks above a small creek. He has not wasted the shareholders’ money by erecting large and substantial houses, stable and blacksmith’s shops, with a store and a post office thrown into the bargain, but has contented himself with putting up tents, and cutting chimneys and fireplaces in the bank.*

The most settled weather in western Tasmania is in February and March, but many water-powered mines found it too dry to operate in those months. April, May and the winter and spring months would normally provide abundant rainfall, but the West Coast weather would then be bracing, to say the least. Rabling would have had no choice but to stay put through the winter and do his shareholders’ bidding by preparing the claim for crushing as soon as possible, much of his time being spent huddled in a sturdy tent.

**The fatal first crushing**

The first half-yearly meeting of the Carn Brea Tin Mining Company in Hobart in July 1883 glowed with a happy anticipation. Neither the £1800 advance on machinery, nor the six calls on shares, had disturbed the shareholders’ equanimity. Ore said to contain a payable 7.5 to 14 per cent tin had been paddocked awaiting the crusher, demonstrating the admirable ‘energy and skill of the company’s mining manager’ (‘Mining’ 1883).

The Carn Brea was one of nine mines on the Heemskirk field to erect a battery during the boom period. In all, 75 or 80 head of stampers were erected (Curtain 1928; Smith 1928). By October 1883 Thomas Williams was ready to crush at the Orient (Curtain 1928). The Cliff and Carn Brea were almost ready to crush, the Montagu and the Cumberland were erecting machinery and mine manager George Lightly of the West Cumberland was preparing to receive machinery (‘Heemskirk’ 1883). However, the low yield from the Orient crushing one month later threw ‘a great damper … on lode tin mining at Mount Heemskirk …’ (Editorial review, 1884). Confidence in the field evaporated.

The small amount of ore apparent in the Carn Brea battery and the small amount of mullock accompanying it confirm that little crushing was done there. The Carn Brea Tin Mining Company kept going until at its second half-yearly meeting in March 1884 it was revealed that, although assay results from the first shipment of 30 bags of crushed ore were not yet available, directors regarded mining operations as a failure. Not surprisingly, work delays and heavy freight costs had inflated expenditure. Work had been suspended, and many shares in the company had been forfeited. One of the directors, William Crooks Grubb, condemned Rabling’s management, and several disputed that he had secured any tin from the mine. Eventually, shareholders voted to accept Rabling’s offer to take the mine on tribute (that is, working the
company’s lease for a percentage of the value of ore won, so at no cost to the shareholders), the unknown value of the 30 bags of tin being taken as part payment for the wages the company owed him (‘Mining’ 1884). All work seems to have been abandoned soon after. No further substantial work appears to have taken place at the Carn Brea Tin Mine, and Rabling appears to have left Tasmania soon after. The fate of the original battery is uncertain.

Thureau’s faith in the Heemskirk tin field proved unjustified, and recriminations were soon underway at abandoned mines such as the Carn Brea. The Mercury’s ‘regular’ Heemskirk correspondent James Fitzhenry recalled one mine manager telling a politician that Heemskirk ‘would be the greatest mining centre in the world’ (‘The Orient Tin Mine’ 1884). In May 1884 a Launceston Examiner correspondent reflected on the ‘grand place’ that was to have been built at the port of Trial Harbour. Now, however,

de principal hotel [was] in the hands of mortgagees; the other hotelkeeper in a chronic state of complaint about the dullness of trade; seaweed and pigface reclaiming the sandy avenue called the main street; a jetty and crane, which cost £1500 looking wofully [sic] to seaward in sympathy with the general complaint of commercial atrophy; and the Commissioner’s residence stuck on a sand terrace overlooking the town with a half-mast-high aspect (‘Shaugraun’ 1884).

Although Trial Harbour would enjoy a brief resurgence as the port for the Zeehan–Dundas silver-lead field, before being replaced by Strahan, the Heemskirk tin field would never fulfil early expectations. The Heemskirk lode boom disaster appears to have been the result of rich patches of detrital cassiterite being mistaken for large ore bodies like those which were then paying dividends at Mount Bischoff (Bissell 1962, p.93). Speculation was fed by premature judgement of the field, both by Inspector of Mines Thureau and by mostly Cornish miners eager to find a billet in the antipodes. Reporting on the tin field in 1902, Assistant Government Geologist George A Waller commented that ‘in some cases it is impossible to avoid the conclusion that the managers did not know tin ore when they saw it’. One battery was erected to work what turned out to be not cassiterite, but black tourmaline (Waller, p.12). Former Peripatetic Tin Mine manager Con Curtain estimated that at least £100,000 were spent at Heemskirk 1880–84 for a return of about 70 to 100 tons of dressed tin (Curtain 1928). By 1962 total production on the field had not progressed substantially, amounting to about 668 tons of metallic tin (Bissell 1962, p.112). The Carn Brea Tin Mine probably contributed nothing to this figure.

Cornish miners working overseas took with them their highly developed sense of superiority—an identity drawn from the culture of ‘industrial prowess’ that pervaded Cornwall until at least the mid-1860s—and re-invented it abroad as the myth of ‘Cousin Jack’: the self-belief that insisted that the Cornish were innately qualified above all others as skilled hard-rock miners (Payton 2007, p.32).

The Heemskirk hard rock tin mining boom of the 1880s did nothing to vindicate the self-ascribed superiority of the Cornish hard rock miner. Nor was there evidence at Heemskirk of Cornish miners working together to exploit their ethnicity as an economic strategy. In fact, in the case of Robert Hope Carlisle, who openly disparaged the work of his predecessor at the Mount Heemskirk mine, ASR Osborne, the opposite appears to have applied (‘Mining’ 1902). Osborne claimed to have been driven out of Mount Bischoff by Cornish miners, and at Heemskirk, just as at Bischoff, the Cornish miners probably regarded each other as rivals and competitors for work (Osborne 1881). Many Cornish miners had found new careers in South Australia’s ‘Little Cornwall’ copper mining district, which some of them saw simply as ‘an Antipodean extension of the Cornish mining industry’ (Payton 2007, p.11). The failure of the Carn Brea Tin Mine and the failure of the Heemskirk tin field it was part of seem to reflect the yearning of Cornish miners for yet another ‘little Cornwall’ outside their economically-depressed homeland. Unfortunately, Heemskirk failed to meet the expectations of either miners or investors. At least nine of Heemskirk’s Cornish mine managers continued their careers in the Australian colonies, although one, John Addis, also went further afield, dying on the Malayan tin fields (Haygarth 2017, pp.75–77).

The Carn Brea Mine can also be viewed in the light of conflict between the self-educated and the ‘professional’ (qualified) mining engineer which was most evident at the Mount Bischoff and Anchor Tin Mines. Tasmania had a university-trained government geologist, Charles Gould, as early as 1859, and the Penguin and Mount Bischoff mines ushered in the era of the German mining-academy graduates, men like Georg Ulrich, Ferd Kayser, Robert Sticht, William Harper (WH) Twelvetrees and Max Heberlein. Kayser dismissed Cornish mining methods as antiquated (Haygarth 2017b, p.83), yet Gustav Thureau’s premature predictions about the Heemskirk tin field showed that even academy men (Thureau was thrown out of the Royal School of Mines at Clausthal, Lower Saxony, before graduation) were not immune from misjudgement (McMullen 1996). Cornish mine managers like the vastly experienced John Craze were also highly respected for their work in Tasmania (‘Late Mr John Craze’ 1932). The colony waited until 1894 to establish a school of mines for the training of its own professional mine managers at Zeehan (the Zeehan School of Mines, THR#5664). Even then, the Balfour copper boom of 1910–12 showed that having more professional mining engineers on the ground was no guard against mining ‘bubbles’ created by speculators.
Comparative analysis

The Carn Brea is the only one of about a dozen 1880s Heemskirk tin mines to retain an in situ stamper battery and waterwheel. Once used to drive batteries at mines such as the Mount Bischoff, West Bischoff, Princess, King River and Anchor, in situ mining waterwheels are now rare in Tasmania. Those remaining include the remnants of two waterwheels on the Specimen Reef (Dicksen, personal communication), which are inaccessible because they are on the Savage River Iron Ore Mine lease. The Swansea Silver-Lead Mine near Zeehan used a fifteen-foot-diameter waterwheel to pump out its workings but it is uncertain whether this survives (Reid 1922, p.36). The iron Pelton wheel, a type of water turbine which could extract kinetic energy from flowing water (Dallas 1970, p.127), superseded the waterwheel in some situations from the 1880s, being used to drive machinery from the 1890s, for example, at the Magnet Silver-Lead Mine and the Shepherd and Murphy Tin, Bismuth and Wolfram Mine at Moina.

Tasmanian mining sites with in situ stamper batteries are also quite rare: they include the Mount Ellen Gold Mine near Queenstown; the West Bischoff Tin Mine plant near Waratah; the Mount Bischoff Tin Mining Company’s ruined Forty Head Mill at Waratah; the Specimen Hill tin workings, Balfour; the Lode Mine at Adamsfield; the Cambria Tin Mine near the Blue Tier; and the Anchor Tin Mine, Blue Tier.

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The Carn Brea Tin Mine is of historic cultural heritage significance because it demonstrates the development of the Tasmanian mining industry, particularly the creation of a short-lived and ultimately unsuccessful mining boom, the adoption of the Cornish mining tradition during the late nineteenth century, the failure of Cornish expectations placed upon Tasmanian mines and the speculation driving the industry, all of which led to remote, unproven mines being furnished with crushing machinery. The Carn Brea is also significant because of its rare demonstration of the simplest form of water-powered mining, it being the last of the Heemskirk tin mines and one of only a few in the state to have a surviving battery and waterwheel. The site has the potential to reveal information about nineteenth-century mining technology and miners’ living conditions, and it has a special association with the Cornish miners and their families who came to Tasmania in significant numbers during the 1870s and 1880s, when they were in demand for their mining expertise, in particular, their practical, economical methods and tin dressing skills.

Significance:

The Heritage Council may enter a place in the Heritage Register if it meets one or more of the following criteria from the Historic Cultural Heritage Act 1995:

a) The place is important to the course or pattern of Tasmania’s history.

The Carn Brea Tin Mine demonstrates the development of the Tasmanian mining industry, in particular, the creation of a mining boom and the adoption of the Cornish tin mining tradition during the mid-to-late-nineteenth-century Cornish ‘diaspora’, in which Cornish mining expertise was spread across the world. The Heemskirk tin field was regarded by some as the ‘Cornwall of the antipodes’, requiring Cornish mine managers and justifying in some cases the names of Cornish mines. The abandoned stamper battery and waterwheel demonstrate what Geoffrey Blainey (1993, p.44) has called ‘almost a first commandment in Tasmanian mining’, that is, the installation of machinery before a mine was proven. Their abandonment in the West Coast scrub also demonstrates how those expectations of a tin field in the Cornish tradition, with lodes that would ‘live down’ under the ground and last decades or centuries, were defeated. The use of water power, as demonstrated by the ruined water wheel, wheel pit and dam, was emblematic of nineteenth-century mining in western Tasmania.

b) The place possesses uncommon or rare aspects of Tasmania’s history.

The features of the site—adit, stream, dam site, water race, wheel pit, waterwheel and stamper battery—make it easy to interpret this as a mine employing the very simple technology of generating motive power from water to drive a crushing plant. The Carn Brea Tin Mine is a rare demonstration of this, being one of only a few nineteenth-century Tasmanian mines with both a battery and a waterwheel still on site (the waterwheel is in pieces). It is one of only about a dozen Tasmanian mining sites with stamper batteries remaining in situ.
c) The place has the potential to yield information that will contribute to an understanding of Tasmania’s history.

Because of its remoteness, the site of the Carn Brea Tin Mine has remained virtually untouched since 1884. The site was occupied for perhaps three years by a Cornish miner, and periodically by assistants, and has the potential to yield information about the operation of a nineteenth-century tin mine and the living conditions of nineteenth-century miners. A main hut, a blacksmith’s shop and perhaps an ore shed would have been built, while Rabling’s tin dressing appliances, vegetable garden and refuse area may also be under the scrub on the site. Investigation of the site may contribute information on questions such as the tin dressing appliances used and the diet available in such a remote place.

d) The place is important in demonstrating the principal characteristics of a class of place in Tasmania’s history.

The 1880s Heemskirk hard rock tin mines are a distinct class of tin mines mostly operated by Cornish mining managers using Cornish tin-dressing methods. At least six of them had waterwheel-driven batteries with a set of boulders for tin dressing. Although no tin-dressing appliances have yet been found at the Carn Brea Tin Mine, it is the only mine on the field which retains its stamper battery and waterwheel, thereby allowing it to demonstrate the primary treatment of tin ore on this field.

e) The place is important in demonstrating a high degree of creative or technical achievement.

No Data Recorded

f) The place has a strong or special association with a particular community or cultural group for social or spiritual reasons.

No Data Recorded

g) The place has a special association with the life or works of a person, or group of persons, of importance in Tasmania’s history.

The Carn Brea Tin Mine has a special association with the migrant Cornish mining community. During the mid-to-late-nineteenth-century Cornish ‘diaspora’, in which Cornish mining expertise was spread across the world, enclaves of Cornish mining families were established in places with hard-rock-mining industries like the Moonta-Kadina-Wallaroo ‘Copper Triangle’ in South Australia and Hidalgo State in Mexico (Schwartz 2011). Emigrant Cornish miners ‘asserted an innate superiority as hard-rock miners’, exploiting their Cornish ethnicity as an economic strategy (Payton 2004, p.234; James 1994, p.234). The Carn Brea Mine demonstrates the simple, economical mining methods for which the Cornish were renowned, with a waterwheel harnessing a creek in order to drive a stamper battery (archaeological investigation may uncover the mine’s dressing appliances).

h) The place is important in exhibiting particular aesthetic characteristics.

No Data Recorded

PLEASE NOTE This data sheet is intended to provide sufficient information and justification for listing the place on the Heritage Register. Under the legislation, only one of the criteria needs to be met. The data sheet is not intended to be a comprehensive inventory of the heritage values of the place, there may be other heritage values of interest to the Heritage Council not currently acknowledged.
Note
1. Lot 1 represent the registered boundary for 'Carn Brea Tin Mine', #9881 on the Tasmanian Heritage Register.
2. Lot 1 is the partial parcel of LPI GFV81, the boundary of which is marked by a heavy black line and described below.
3. Lot 1 is centred on the approximate location of mine battery and uses a 100m radius to dictate outer extent of lot.
4. All boundaries are parcel boundaries, details of individual land parcel boundaries may be accessed through the Land Information System Tasmania (LIST).