

**VICTORIAN GOLDFIELDS
PROJECT**

**HISTORIC GOLD MINING SITES
IN
HEPBURN MINING DIVISION**

REPORT ON CULTURAL HERITAGE

**Department Of Natural Resources
& Environment**

Draft April 1999

1. Background

1.1 Introduction

This report is based on the results of a historical archaeology survey undertaken between 1996 and 1998. The historical research, fieldwork and public consultation undertaken within the study shows that the Daylesford district experienced extensive gold mining from 1855 until the 1940s.

The study area is extensive and centres on Daylesford. It stretches from Yandoit in the north, Campbelltown and Smeaton in the north-east, south to Spargo and east to Glenlyon.

The majority of the sites investigated date from the late nineteenth century, and the main gold mining site types recorded are associated with shallow alluvial, deep lead and quartz reefing. The recent age of surviving mining relics is a reflection of the temporary and basic nature of the early gold rush activities undertaken and the constant re-mining that occurred, resulting in the disappearance of earlier sites.

1.2 Site Gazetteer

The study involved a detailed analysis of historical records, previous survey work results and where possible community consultation. The assessment process used was designed to achieve the best practical results within the project's time-frame. The logistics of undertaking survey work over such an extensive area meant that only those sites assessed as having high heritage significance being visited, recorded in any details and included in the gazetteer that forms part II of this report.

2. Introduction

2.1 Purpose of report

The study seeks to identify, assess and document the cultural heritage values relating to the historic theme of gold mining in the Hepburn or Daylesford Mining Division. The categories or types of sites covered by the report are shallow alluvial (shaft sinking, puddling, sluicing and dredging), deep lead (tunnelling and shaft sinking); quartz reefing (tunnelling, shaft sinking and open cutting), and re-treatment of ore (by chlorination and cyaniding).

The study will make a significant contribution to a state-wide systematic coverage of historic gold mining themes.

2.2 Aims of report

The aims of the project are to:

- conduct historical research on the historic gold mining-related categories of shallow alluvial, deep lead, quartz reefing and re-treatment of ore,
- compile information on places identified from earlier studies,
- identify and record all significant historic mining relics and objects,
- assess significant historic mining relics and objects for listing on the Victorian Heritage Register and Heritage Inventory, and
- document the project's methodology and decision-making processes.

3. Methodology

3.1 Introduction

This study forms part of a State-wide inventory of historic gold mining sites which commenced some eight years ago. The primary aim of the State-wide inventory is to systematically record, interpret, and assess historic gold mining sites on public and private land in Victoria for the purpose of providing a sound basis for management of such sites.

3.2 Historical Research

The assessment process was designed to achieve the best practical results within the project's time-frame. The first stage of the assessment was an investigation of primary and secondary historical sources, including Mining Surveyors Monthly, Quarterly and Annual Reports; Mines Department maps, plans and reports; photographs and illustrations; published local histories and newspapers.

3.3 Assessment Process

3.3.1 *Site Gazetteer*

For each gold mining locality, a chronology of activity was compiled, detailing gold discoveries, mining parties and machinery, settlement patterns, population levels, and gold production figures. This information was used to target important mining localities and specific sites for fieldwork, and also aided in the interpretation of sites.

The focus of the survey work was entirely on investigating the relics of above ground mining operations. For obvious reasons of access and safety, it did not cover any aspects of underground mining. The perspective presented by the inventory is thus biased, for on some types of mining sites, in particular; quartz reefing and deep lead mining, the bulk of operations and human effort took place below ground, hidden away from sight. A physical picture of underground mining technology and features can only realistically be gathered and recorded when current mining ventures take place on old gold mining sites.

3.3.2 *Site Selection Process*

The sites identified for survey were those considered likely to have significant heritage values. Information on some seventy sites was reviewed resulting in forty-eight sites being identified for recording. The following two-stage review process was used to select the sites to be recorded:

- a) *Consultation process*—Given the comprehensive historical research undertaken as part of the State-wide survey, additional information was mainly sought through consulting present and former Department of Natural Resources and Environment (NRE) field staff (foresters and land protection officers), Parks Victoria rangers, and local community members. Information sought included:
- the integrity and condition of sites: in particular, whether the site still exists or has visible remains (including foundations),
 - whether they know of other sites of a similar nature which had physical remains, and
 - names of other informants who may have knowledge of gold mining activity sites in the Daylesford Mining Division.

The consultation process was designed to sieve out sites not worth a visit because no substantial evidence remained. It was also designed to pick out sites which had played only marginal historical role (and hence not highlighted by the historical assessment) but now may have a high scientific significance due to their intactness or rarity.

- b) *State heritage threshold*—The following significance indicators were further used to refine the list of site to be surveyed:

- the role the place played in the historical development of the region and State's gold mining industry. For any given place significance will be greater where evidence of an association or event survives in situ,
- the scientific importance of the data represented in the features of a place and upon the degree to which the place may contribute further substantial information,
- the degree to which the place can be demonstrated as having historical integrity and /or rareness in its intactness or condition better than any other similar place,
- the measure of the awareness in the local community of the site and its role in the history of the locality, and
- the degree the setting of the place had been modified.

3.4 Site survey

The terms of reference for the project required that sites assessed as having potential high heritage values be visited and documented following set guidelines, so that they were comprehensively and uniformly identified, located, described, assessed and photographed. Time and budgetary constraints necessitated that recording be of a fairly basic standard: brief descriptions, rough plans and photographs. It was envisaged that more detailed recording of the more significant sites would be undertaken at the end of the project, when all sites had been identified, and the more significant sites had been determined.

3.5 Final ranking

The main thrust of current heritage assessment in Australia is that the more significant cultural places are generally those that retain unique qualities which can best explain the past to present and future generations. Seven of the forty-eight places were subsequently found to meet that threshold for listing either on the Victorian Heritage Register or the Heritage Inventory.

Places were assessed against the following criteria developed by Heritage Victoria to determine whether a place or object is of State significance and should be placed on the Victorian Heritage Register:

- a. The historical importance, association with or relationship to Victoria's history of the place or object.
- b. The importance of a place or object in demonstrating rarity or uniqueness
- c. The place or object's potential to educate, illustrate or provide further scientific investigation in relation to Victoria's cultural heritage.
- d. The importance of a place or object in exhibiting the principal characteristics or the representative nature of a place or object as part of a class or type of places or objects.
- e. The importance of the place or object in exhibiting good design or aesthetic characteristics and/or in exhibiting a richness, diversity or unusual integration of features.
- f. The importance of the place or object in demonstrating or being associated with scientific or technical innovations or achievements
- g. The importance of the place or object in demonstrating social or cultural association.
- h. Any other matter which the Council deems relevant to the determination of cultural heritage significance.

3.6 Victorian Heritage Register and Inventory

In the course of fieldwork 48 historic mining sites were assessed for potential for on-site investigations. Of these sites, 7 were assessed as possessing heritage values which warranted their nomination to the Victorian Heritage Register. During the preparation of this report all but one of the places has been placed on the Victorian Heritage Register. The remaining place will be nominated when further work is carried out to clarify boundaries and ownership details. The rest of the places have been classified as archaeological sites and have been placed on the Heritage Inventory.

The table below shows the current state of registration for historic mining objects in the Hepburn Mining Division as of April 1999.

Site No	VHR No	Name	Goldfield
2.0	H1395	Breakneck Gorge Puddling machine	Hepburn
7.0	H1760	Maxwell Consolidated Quartz Gold Mine	Daylesford
39.0	H1259	Blowholes Diversion Tunnel	Hepburn
41.0	H1257	Jim Crow Diversion Sluice	Hepburn
44.0	H1306	New Nuggetty Gully Alluvial Gold Workings	Yandoit
45.0		Minotti's flour mill & gold mine	Franklinford
48.0	H1413	Thomas Smiths 'Good Bed' Fossil Quarry	Yandoit

4. Report Body

4.1 Introduction

The research of primary resource material and community consultation undertaken in the course of this study were designed to trace the development of the various gold mining activities, in order to produce a picture of the underlying technology and physical remains and to identify potential sites. Both lines of investigation concurred that the focus of gold mining activity in the district took the form of shallow alluvial, deep lead and quartz reef mining. Historically, the distribution of these sites was extensive with often intensive re-mining occurring.

The following historical overview is designed to provide a context for surviving historic mining relics and objects in the Hepburn Mining Division.

4.2 Historical Overview

Shallow Alluvial Mining

The Hepburn Mining Division was opened in 1851 by a series of gold discoveries along Jim Crow Creek. The creek and its various tributaries formed part of the headwaters of the Loddon River. It took some five years before a substantial population had assembled along the creek. The miners being hampered by the local environment - its steepness, heavy timber, dense undergrowth of scrub and fern, and cold and wet climate.

The source of the gold obtained by the first miners was the ancestral course of the Loddon River. The sediments of the old riverbed had been covered by lava flows when there had been active volcanoes in the area. Over time, the water flow of Jim Crow Creek had worked away at the edge of the lava flow, washing away underlying auriferous sediments, concentrating the gold in the modern creek bed.

The gold miners soon opened up other new goldfields, the more notable being the Dry Diggings and the Coomoorra or Wallaby Creek area. They had also successfully prospected a mile wide belt of auriferous reefs running from Daylesford to Yandoit. Miners also commenced to quarry into the ancient sediments exposed along the volcanic escarpments, tunnelling under the basalt itself in pursuit of untouched streambeds. By mid 1850s the district's largest township, Daylesford, had been formed. By this time, the field's alluvial character had become apparent: it was a field that presented little opportunity to make a quick fortune, but was an extensive one and so promised good wages - estimated from £2 to £3 per week - for many years.

From the late 1850s to mid 1860s, shallow alluvial mining preoccupied the vast proportion of the district's mining population, which numbered in the several thousands. A network of water races underpinned the operations of these miners. Speculative miners such as Wardell, Liepold, Bianchi, Cortial, Hunt, Wilson, Crocker, and Coppock constructed these races. The race-owners sold their water to the miners for payments ranging from £3 to £4 a week. The races brought water from the headwaters of various creeks, and often run for distances of 15 to 20 miles.

The initial focus for the water races were the eastern tributaries of Jim Crow Creek: including Wombat, Stoney, Spring, and Sailor's creeks. These creeks covered the country from Shepherds Flat through Hepburn Springs to Daylesford. Both the owners of horse-powered puddling machines used the water supplied by the race-owners, and miners engaged in sluicing operations. The latter were working the creek beds and banks with sluice boxes, or were ground sluicing (washing away the topsoil to bedrock) the hill slopes. The mining registrar estimated it in 1859, that those engaged in puddling and sluicing were making good wages, averaging from 12 shillings upwards per man per day. There was a tendency for puddling to be undertaken by Europeans miners, and sluicing by Chinese. This demarcation appears to have commenced in 1859 when a number of Chinamen were observed fossicking about the old alluvial workings, waiting for an opportunity to begin sluicing or paddocking¹. By 1861, creek sluicing was described as being almost exclusively carried on by the Chinese.

From 1861 to 1865, the race-owners extended their channels into the Dry Diggings Creek area, and the country to the west of the Jim Crow, which included Champagne, Old Tom, Sulky, German, Boot's, Brandy Hot, Break-O-Day, Don't-Wake-Em, and Butterfly gullies. The last major extension of the race network took place in 1865, when two channels were constructed to convey water from Deep Creek to the Yandoit Diggings. After this, the extension of the race system stalled, and shallow alluvial mining lost its vitality. The race owners considered any further extensions of their water supply schemes would cost them more money than they could recoup. The distances involved meant that the supply of water to the new country could only be guaranteed for 2 to 3 months. To extend the races beyond their 1865 limits also meant the frequent, and very costly, crossings of deep gullies and creeks, in some cases up to 200 feet or more.

After 1865, shallow alluvial mining continued to be carried out in the district. Miners made a living out of it, but never again did it feature as a significant branch of mining. The district appealed to many small-time miners, especially after the 42nd section of the Amending Land Act 1865, which meant that they could acquire land and commence to farm the rich volcanic soils. This meant that shallow alluvial mining and farming could be easily and advantageously combined.²

It was not until the 20th century that new technology was employed to work the old shallow alluvial ground. In the early 1900s, a bucket dredge worked around Shepherds Flat as far as the Breakneck Gorge. The dredge foundered in 1903 just south of Excelsior Bridge where today trout fishermen still use part of its timber skeleton as a fishing platform.³ Another bucket dredge worked in Wombat Flat in 1905 with barely payable.⁴ Hydraulic sluicing also was tried in the district, but failed to prove profitable. Such was the case of a hydraulic sluicing company named Sewell's Dredging who attempted to carrying on operations in Sailor's Creek, a short distance north of the Sailor's Falls.⁵

Deep Lead Mining

In 1859, the district's mining surveyor referred to tunnelling as providing steady and long-term employment. This was despite a very considerable outlay of capital and labour before payable gold was obtained: many of the tunnels had to obtain a length of 1,800 or 2,800 feet before striking gold.⁶ Tunnelling was not so much affected by the scarcity of water as puddling and

1 Mining Surveyors' Reports

2 Mining Surveyors' Reports

3 Maddicks, Henry T., 100 Years of Daylesford Gold Mining History, p.42-43

4 Annual Report

5 Annual Report

6 Mining Surveyors' Reports

sluicing, because the tunnel from which the gutter was worked produced water enough itself to feed a puddling machine. ⁷ Swiss-Italian miners generally undertook tunnelling.⁸

There were four principal tunnelling localities in the district. These were under the elevated (basaltic) plains and hills along Spring and Sailors Creeks, and from then down Jim Crow Creek through Franklinford towards Yandoit; at Deep Creek, particularly Fiery and Sebastopol Hills; along Wombat Creek, Daylesford, particularly Italian Hill; and at Yandoit, including Frenchman's and Green or Bald hills. By the mid 1860s, tunnelling declined in importance, as easily reached gutters were exhausted. Some localities, such as Fiery and Sebastopol hills, Deep Creek, became so undermined that the greater portion of the ground collapsed down from the surface. To continue in areas that escaped such dramatic collapses meant tunnelling beyond 2,000 feet and only a few miners were prepared to choose this option. Of these, the most notable were the Ballarat Company (later known as Sailors Prince Alluvial Co) at Deep Creek and the New Federal Company at Italian Hill (later known as the Great Tunnelling and the Long Tunnel). Both of these operations reached around 5,000 feet. Another company, the New Era G.M.Co., at Franklinford, extended a tunnel to a distance of 3000 ft.⁹

In conjunction with the tunnelling operations, deep lead mining (sinking shafts down through the basalt) commenced in the Daylesford area in the early 1860s. The least successful were the deep lead miners at Yandoit. They found the ground would not pay being worked on a large scale, the gold generally being found in narrow gutters. The most successful deep lead mining occurred at Daylesford when miners traced the Township Lead, from the tunnelling ground at Italian Hill, in a north-easterly direction, towards Coomoora. The Township Lead proved to be very rich in the relatively shallow ground near Italian Hill, with some of the claims obtaining a minimum of £10 per week per man. ¹⁰ Some of the more successful companies in the shallow ground during the early 1860s included the Emerald, Haphazard, Homeward Bound, Union, Wombat Hill, Defiance, and White Star companies.

By 1864 the steady success of deep lead mining had increased the mining population and produced an environment ripe for a mining boom. Within the year, some twenty-five steam engines of an aggregate power equal to 532 horses and representing a capital of upwards of £25,000 had been installed. ¹¹ The boom was sparked when a number of companies, including the Royal Standard, Nelson, and Californian, successfully prospected the Township Lead in deep ground and confirmed its trend and continuation through Coomoora towards Glenlyon. Within a short time all the land between Daylesford and the junction of Kangaroo Creek and the Loddon had been secured under the mining bye-laws for mining purposes. At the same time, a company, through boring, proved the existence of a deep lead near Mount Franklin and a large tract of land in that area was secured (leased) for deep lead mining.

To the west of Daylesford, came more good news when the Extended Company, after four years incessant work, bottomed on the Corinella (Eganstown) Lead, near Deep Creek. Several other companies - the Grand National (former Blanket Flat), United Military, and Corinella - also worked the Corinella Lead during 1864. Of these, only the latter mined with any significant success, obtaining 2,580 ounces of gold in a career spanning some eight years. Much further west, the Glengower Gold Mining Company also prospected a new lead.

By the winter of 1865, the deep lead mining boom had stalled with only a few companies on the Township Lead (all around Coomoora) having provided their investors with any promising signs. Of these, the most significant were the Wombat Extension, who bottomed at likely looking gutter at 260 feet; and the Astley United G. M. Company who obtained gold from a 50ft wide gutter, depth 138ft. The latter company installed a 10-head battery, one engine of 27hp for pumping, and

7 Mining Surveyors' Reports
8 Mining Surveyors' Reports
9 Mining Surveyors' Reports
10 Mining Surveyors' Reports
11 Mining Surveyors' Reports

crushing, and a second engine for winding.¹² The Astley United G. M. Company continued to work into the early 1870s, ending its career as the Victoria Company. The last significant deep lead mining in the Coomoorra area was undertaken the Leech's Creek G. M. Company in 1889.¹³

Deep lead mining on the lead at Mount Franklin proved to be less successful, and its not until the late 1870s, that one company, the Franklinford Gold Mining Company, mined on any significant scale. A few years later, the Mount Franklin Estate Gold Mining Company also struck gold, followed by the Shakespeare and Great Western companies in the mid 1880s. By the end of the decade, deep lead mining had ceased in the area.

After a fairly dismal period during the 1870s, deep lead mining revived slightly in the early 1880s due to the discovery of a new lead near Smeaton. For several years, two companies, the Hepburn Rocky Lead and Hepburn Home Paddock dominated this new lead, named the Rocky Lead. Both companies erected large machinery, but only the latter appears to have mined profitably, declaring at least one divided of 2 shillings per share of 18,000 shares. The company sunk two shafts, erecting at the second, an 18 inch cylinder pumping engine with a set of pumps, an 18 inch cylinder winding engine with 2 Cornish flue boilers, and two 2 puddling machines.

After the 1880s, the Hepburn Mining Division experienced little deep lead mining activity until the 1930s when there was some activity around Yandoit and on the Rocky Lead. The revival at Yandoit appears to have caused by the prospecting success of the Glenfine Company. For the next seven or so years several companies mined with some success, the last two to close down being the Central and South Yandoit Alluvial Co.¹⁴ The mining that took place on the Rocky Lead was also short-lived, with operations confined to the upper parts of the lead and its minor tributary leads: the Hepburn Rocky, Fraser's and the Phoenix leads. Several small companies were formed, such as Grave United Co. and South Fraser's Co., both of which closed about 1944. The leads were found to only contain occasional small rich patches.¹⁵

The last deep lead mining in the Hepburn Division took place in 1964-69 when the Lady Jennifer mine was worked for a return of 9.46kg of gold. This still holds the record as being the last deep lead underground mine in Victoria.¹⁶

Quartz reefing

The Mauritius Reef, in Kidd's Gully, was one of the first reefs worked in the district. The stone was burnt in a kiln, and then passed through a Chilean Mill, yielding two ounces of gold to the ton.¹⁷ By 1856, miners had successfully prospected a belt of auriferous reefs running from Daylesford to Yandoit. Of the reefs discovered, those outcropping on a long ridge overlooking Daylesford which had the most immediate influence on the district. Several small parties of working miners worked the reefs, collectively known as the Wombat Hill Reefs (now known as Cornish or Argus Hill). The most successful of these was a party of Cornish men (known as the Cornish Company). Their mine produced some £50,000 worth of gold within its first ten years, most of which was obtained prior to 1860. The mine was sold in 1867 to a public company bearing the same name. The continual success of the Cornish Company throughout the nineteenth century saw the hill becoming a centre for mining and technological development, which was on par with some of the Central Victoria's greatest quartz reefing fields, such as Bendigo, Stawell, Clunes, and Maldon.

12 Mining Surveyors' Reports

13 Mining Surveyors Reports

14 Maddicks, Henry T., 100 Years of Daylesford Gold Mining History, p.48-49

15 Canavan.F., Deep Lead Gold Deposits of Victoria, 1988,p.33-34

16 Canavan.F., Deep Lead Gold Deposits of Victoria, 1988,p.33

17 Mining Surveyors Reports, June 1889

By the beginning of the 1860s several other rich reefing locations had emerged along side the Wombat Hill reefs. These included Connell's and Nuggetty Ajax reefs, between Connells Gully and Tipperary Point on Sailors Creek; Specimen Parkers Reef on the Dry Diggings; and Frenchmans, Steels, Pioneer and Humburg reefs at Yandoit.¹⁸ Unfortunately for the Yandoit miners, their reefs proved poor and by 1861 most of the easily won gold had been recovered. Small quartz lodes were also prospected elsewhere in the Campbelltown area, especially to the south-east of Campbelltown, along the middle reaches and headwaters of Stockyard Creek. The main reefs worked in this area were the Harry Lauder, Glengower, Lady Blanche, Glamorgan, and the Oliver Cromwell. Mining in the area was inconsequential during the nineteenth century.

Another successful mine of the early 1860s was the Specimen Hill Q.M Company. Formed in 1862, the company mined profitably until about 1877.¹⁹ In December 1864, splendid returns from the reef caused a small reefing boom, which saw 12 claims, totalling upwards of 12 miles, taken up along the line of reef.²⁰ In 1869, the Specimen Hill Quartz Mining Company boasted a large mining plant including 17 heads of stampers, Hungarian mills, Chilean mill, buddle, and also the furnace.²¹

The re-organised Cornish Company dominated Daylesford's 1870-80s quartz reefing scene. During this time, it crushed 169,809 tons for 51,067 ounces of gold, and had the most powerful and elaborate plant in the district. The drainage from the underground workings was of a very formidable character, viz., 8,000 gallons an hour, costing £54 per week, the number of men employed on average being 80.²² By 1874, the company had erected its four steam engine - totalling 100hp.²³

By the 1870s, companies were commencing to treat pyritic ore using the chlorination process. The largest of these concerns was the Daylesford Pyrites Company. In 1872, this company had a 6hp engine, a 30-foot long furnace, and two arastras or grinding mills.²⁴ The Pyrites Company not only treated ore from local mines, but ore brought in from other districts.²⁵ The treatment of pyrites at Daylesford culminated with the formation of the Daylesford Pyrites Works in 1889. This company employed the Newbury-Vautin Improved Rapid Chlorination Process for Gold Extraction, constructed a splendid plant using some 150,000 bricks in the construction of the furnaces and chimneystack.

By the end of the 1870s, the Cornish Company's production began to decline, and by the early 1880s it was no longer mining profitably. Almost on cue for the health of the district's mining health came the discovery of a reef at Blind Creek, at a locality about 1½ miles south-west from Daylesford. This discovery gave rise to the formation of the Rising Star Company, which mined up until 1886, paying out some £43,920 in dividends.²⁶ The company had an excellent plant comprising seven boilers, five engines and 28 head of stamps. At much smaller discovery occurred near the southern boundary of the mining division, which resulted in the mining of the Great Northern Parker lode, near Korweinguboora.

While Daylesford's mining scene was being dominated by the success of the Rising Star, the Cornish Company commenced a gradual process of amalgamation and upgrading of its machinery. In December 1880, the company acquired the North Cornish claim, and in 1886,

18 Mining Surveyors' Reports
19 Maddicks, Henry T., 100 Years of Daylesford Gold Mining History, p.37-38
20 Mining Surveyors' Reports
21 Mining Surveyors' Reports
22 Mining Surveyors Reports, June 1889
23 Mining Surveyors' Reports
24 Mining Surveyors' Reports
25 Mining Surveyors' Reports
26 Bulletins of the Geological Survey of Victoria, No. 29, Some Daylesford mines, pp 9-10

purchased the lease and machinery of the Cornish Extended Q.M.Co. This made one large lease with 7 powerful horizontal engines, varying from 11 to 29 inch cylinders, in all about 220 horse-power. They also had a 28 head crushing plant. The Cornish Company focused its main developmental resources on the North Cornish claim, and by 1890 this claim had a crushing mill comprising 50 stamps and 14 Frue Ore Concentrators.

Despite the massive plant assembled on the Wombat Hill Reefs little profitable mining took place during the 1890s. This changed in 1903, when an English Company, under the name of the Victoria Cornish Co. Ltd, took over the hill. The company erected new plant and re-used some of the old, and by 1906 were operating 50-head of stampers, fourteen engines, and were mining from four shafts.²⁷ The company were able to turn out a steady and profitable yield of gold until the First World War.

In 1905, the Ajax Company commenced mining at the southern end of Daylesford, on the old Nuggetty-Ajax line of reef. The company placed a powerful winding plant over the old Ajax shaft, and was soon into production and continued to work until the 1920s. During this time the Ajax Company paid £149,437 in dividends from 223,168 tons yielding 102,110 ozs. ²⁸ Such success, had, by the following year, sparked a mining boom. Whereas in 1905 there had been only about a dozen companies and cooperative parties, at work, in 1906 the field had over 40 registered companies, 24 of which had already equipped their mines with steam winding machinery.

The Ajax Company focused much of the new attention onto their reef line, and soon had many neighbours including the Nuggetty Ajax, North Ajax, Central Ajax, Christens Ajax, and South Ajax -at work. Kidds Gully, to the east of the Ajax-Nuggetty line was also heavily worked during this time by small companies including the Florence, Sailor's Falls, Swiss Reef, Mother Goose, and Frenchman's Reef. An English Company also re-opened the Rising Star-Specimen Hill lines of reef. It installed powerful plant, which was later acquired and operated by the New Specimen Hill Company.

The early 1900s also was the main mining period in the Campbelltown area when the Harry Lauder Company, in 1910, installed a steam-powered mining plant. Its 10-head stamping battery crushed 1,614 tons between 1910 and 1912 for a yield of 398 ounces of gold.²⁹

The early 1900s mining revival was halted by the First World War and it was not until the mid 1930s that Daylesford experienced another spurt of quartz mining. This time, the flagship was the Maxwell Consolidated (also known as Just-In-Time). By 1938, this company had produced enough gold to commence paying dividends, having first repaid a joint state and commonwealth-prospecting loan.³⁰ This company installed a large plant, including a cyanide works. Its success caused a revival of interest in the Daylesford district, and led to the re-opening of the Ajax South, Maxwell West and Florence mines. ³¹ The revival was short-lived. Since then there has been some unsuccessful attempts to re-open mines, eg., in 1947 Ajax Consolidated NL got as far

27 Annual Report
28 Maddicks, Henry T., 100 Years of Daylesford Gold Mining History, p.34-36
29 Harris, W.J., March 1948, pp46-54
30 Annual Reports
31 Annual Reports

as erecting new steel poppet heads over the Ajax shaft. The poppet head was pulled down in 1979.³²

³² Maddicks, Henry T., 100 Years of Daylesford Gold Mining History, p.34-36

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HISTORIC GOLD MINING SITES IN HEPBURN MINING DIVISION

GAZETTEER: STATE & REGIONAL SIGNIFICANT SITES

**Department Of Natural Resources
& Environment**

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36.0	Charlesford Mine	Daylesford	Heritage Inventory	54
37.0	Bryces Flat Mine	Hepburn	Heritage Inventory	55
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39.0	'Blowhole' diversion tunnel	Hepburn	Heritage Register	57
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44.0	New Nuggetty Gully Workings	Yandoit	Heritage Register	63
45.0	Minotti's flour mill & gold mine	Franklinford	Heritage Register	64
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47.0	Harry Lauder Company	Campbelltown	Heritage Inventory	67
48.0	Thomas Smiths 'Good Bed' Fossil Quarry	Yandoit	Heritage Register	68

PLACE NO. & NAME: 1.0 Mitchell's or Collier's Shaft

HI NO: 1.0 H7723-0494

LOCATION: End of Houston Street, east of Lake Daylesford
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Unreserved Crown land

SITE HISTORY:

Argus or Cornish Hill was, during the period covered by the mining surveyors monthly and quarterly reports (1859 to 1891), normally referred to as Wombat Hill South. The hill was the focus of Daylesford's most sustained quartz mining effort. The first reefs on the hill were opened up in 1854-55 and the place soon became a focal point for quartz mining.

At the beginning of quartz mining in Daylesford many small parties or small companies of working miners held claims on the hill. The most successful of these was a party of Cornish men (known as the Cornish Company) and it was their luck which was to have a pronounced effect on the hill's, and to an extent the town's, subsequent nomenclature. Inspired by the extraordinary and continual success of the Cornish Company, the hill witnessed an intensity of mining and technological development, which was on a par with some of the State's greatest quartz reefing fields, such as Bendigo, Stawell, Clunes, Maldon and Walhalla. The following is a brief overview of the hill's machinery installations (mid 1850s to 1930s) which were undertaken by the Cornish, Argus, North Cornish, Cornish Extended, and Victorian Cornish Company.

- 1850s First steam battery on the lower western slope of Cornish Hill was erected by Mr. C. Wilson. Operations of the first Cornish Company--an engine of 24 horse-power, and a battery of 12 heads, erected at Wombat Flat, on the west side of King Street.
- 1864 "The Arastra" company formed with the view of operating upon the large quantity of quartz tailings accumulated in Wombat Flat, by the Cornish Co.'s engine and engines in Long and Johnson's gullies.
Cornish Quartz Company. A new 16-head battery was erected.
- 1871 A pyrites kiln is being erected at south of the Argus Co.
- 1872 Cornish Extended Quartz Mining Co., Wombat Hill South, is erecting a 20-hp engine. The Daylesford Pyrties Co. has a 6-hp engine and furnace 30 ft long; they also have two arastras.
- 1874 Cornish Co. maintains first position, having erected fourth engine--total 80-hp--will work up to 100-hp.
- 1879 The Argus Company is erecting machinery over main shaft.
A crushing of wash is being done at Freeman's battery.
- 1880 Cornish Quartz Mining Company intends to erect machinery on the newly acquired North Cornish claim. The intention includes engine, 22-in. cylinder and boiler.
- 1884 North Cornish Q.M.Co. has purchased the Stone Barn plant at Kingston, which will be at once placed on the claim.
Cornish Extended Q.M.Co. Has finished the erection of the plant which consists of a new 21-inch cylinder engine, with 2 boilers ... engine house is 90 ft. long by 32 ft. wide, with outer connexious. 60 000 bricks and 250 load of stone were used for the foundations, boiler and chimney.
- 1885 North Cornish Q.M.Co. purchased a 21-inch cylinder pumping engine with new boiler.
- 1886 North Cornish Q.M. Co. purchased the Freeman's crushing plant of 16 head of stamps, situated close to the North Cornish shaft ... will give the company a total of 36 head of crushing power.
- 1886 Cornish Q.M.Co. purchased the lease and machinery of the Cornish Extended Q.M.Co., adjoining the Cornish Co. South, making one large lease with 7 powerful horizontal engines, varying from 11 to 29 inch cylinders, in all about 220 horse-power. There are also 3 Tangey and 28 head crushing plant.
- 1887 Cornish and York purchased a double 10 inch cylinder portable engine.
- 1888 Cornish Company ... At the new shaft, Havelock company's old ground, erected the most extensive and powerful pumping and winding plant in the district ... The company has, on various parts of the mine, no less than ten engines of various descriptions, making it one of the best and most complete plants to be found out of *Quartzopolis*.

- North Cornish Q. M. Co. taking down their plant of 16 square stamps and replacing same with 20-heads of revolving stamps ... when completed their plant will be 40-heads of revolving stamps.
- North Cornish No. 1 ... has purchased a new 10-head battery.
- North Cornish Q. M. Co., has cleaned out and re-timbered the Old Fear Not shaft, fixing a 21-inch cylinder.
- 1889 North Cornish No. 1, presently erecting 10 additional stamps, total will be 20-heads.
- 1890 North Cornish Co.--battery of 50 stamps and 14 Frue Ore Concentrators.
- c.1903 No. 1 North Cornish combined with the Fear Not ground, and they crushed at the big Victorian Cornish battery.
- 1905 Victorian Cornish Co erected three winding plants, a first-class tramway from Mitchell's shaft to the crushing plant, and effected considerable repairs and renewals to the crushing plant, which numbers 30 stampers. An additional battery of 20 stampers is in the course of erection.
- The South Victorian Cornish Co., erected a complete winding and crushing plant.
- The Daylesford Co. additional 10-head battery.
- 1906 Victorian Cornish G. M. Co. 50-head of stampers. There are four shafts and twelve boilers and fourteen engines in use.
- The Daylesford G. M. Co. equipped with winding, crushing and pumping machinery.
- 1930s Government battery on Jubilee Lake Road.
- References* Maddicks, Henry T., *100 Years of Daylesford Gold Mining History*, pp 23, 28, 34-36.
Department of Mines, *Annual Reports*, 1905 and 1906.
Mining Surveyors *Quarterly Reports* 1864 to 1890.

DESCRIPTION & INTERPRETATION OF FEATURES:

Argus or Cornish Hill had three main periods of quartz mining. The first took place in the mid 1850s, after the first gold was discovered in Daylesford on Wombat Flat, at the western base of the hill. The diggers traced the gold from Wombat Flat up the gullies draining from the hill and found the auriferous reefs. Large scale company mining commenced on the hill in the mid-1860s with the four mines mentioned above commencing operations. There was third period of mining around the turn of the century when a new company, the Victorian Cornish, took over the whole hill. This company worked all the shafts on the hill and the ore raised was conveyed by a system of tramways to a central 50-head battery (Freeman's). Apart from the shallow line of open cutting, which may date to the first period of mining, the other features observed on the hill all represent the third (turn of the century) period of mining.

Mitchells or Colliers mine site

Mullock heap. Largely intact mullock heap with one main dumping line approximately 50 metres long and 12 metres high; filled or capped shaft.

Mining machinery. Set of large concrete engine and winder beds. There is a possibility that other machinery foundations may survive. The machinery foundations lie to the north of the heap obscured by high weeds. The Victorian Cornish Company constructed the machinery foundations in 1905. The company also constructed a tramway from this shaft which run to Freeman's battery. This battery was also upgraded in 1905.

Other mining features on the hill include:

Argus Company mine: Mullock heap. Located approximately 200 metres south-east of Mitchell's mine. Little survives at this site except for a large mullock heap. All the machinery foundations appear to have been bulldozed.

Line of shallow open cutting: Open cutting. To the west of the Argus Company's mine is a line of shallow open cutting. The workings run in a southerly direction. The shaft has been capped or filled.

Bonnards or Cornish mine: Mullock heap. Located approximately 250 metres north of Mitchells mine. Little survives at this site except for large mullock heap. All the machinery foundations appear to have been bulldozed. The shaft has been capped or filled.

Thomas Look out. On the top of the heap is a small concrete pad, which is all that survives of a town look-out (Thomas) which was a popular tourist venue in the 1940s.

Tramway embankment. At the base of Bonnards Company's mullock heap is a section of a raised carting tramway. This is part of the an extensive system of tramways that once existed on the hill and which conveyed ore to a crushing works (Freeman's) which was located on the northern side of the hill.

The foundations for this battery were bulldozed a few years ago to make way for a school playground.

Little Cornish mine: Mullock heap. Located between Bonnards and Mitchells mines, slightly to the east. Small intact mullock heap.

Alluvial workings: Sluicing or surfacing. All the gullies and creeks draining from the hill have been worked for alluvial gold and most bear the deep sluicing scars of their most recent mining phase.

CONDITION OF FEATURES: The line of reef workings on Argus or Cornish Hill have an extensive coverage of weeds (broom, blackberry and firs) which made it hard to make an accurate assessment of what survives. Poor integrity, mainly landscape values. Only the Mitchell mine site has any significant machinery foundations. Foundations of Freeman's battery did exist until quite recently but these have been bulldozed.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—because of the survival of foundations and mullock heap.

Archaeological potential—yes.

Network values—Mitchells or Colliers shaft is part of a network of sites on Cornish or Argus Hill. The quartz mining undertaken on the hill was certainly central to the development of Daylesford. The quartz mining operations on the hill are well-recorded through historical photographs and mining records and plans. The hill is viewed by a section of the community, particularly the older generations, as being symbolic of the gold mining origins of the Daylesford.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear 1998.

PLACE NO. & NAME: 2.0 Breakneck Gorge Puddling Machine Site

VHR NO: 2.0 H1395

HI NO: 2.0 H7723-0495

LOCATION: Breakneck Gorge, junction of Spring and Jim Crow Creek. Puddler located on northern bank of Spring Creek

MUNICIPALITY: Hepburn Shire

LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

Alluvial mining along Spring Creek commenced in 1853 when a rich and extensive alluvial deposit (known as the elevated plains lead) was discovered underlying the thick basaltic or volcanic lava deposit through which the creek had cut its course. The miners tunnelled under the basalt cap and obtained gold from ancient river gravels. These gravels had been deposited in the Tertiary period, up to forty million years ago.

The auriferous wash retrieved was treated in puddlers or sluice boxes, and the tailings (river pebbles) were deposited in heaps at the base of the escarpment. The water for treating the wash was conveyed by water races. One such race, which travelled along the east bank of Spring Creek was in existence prior to 1859. This race appears to have been constructed by Phass & Company.

The mining of the sub-basaltic wash was still going strong in 1861 when it was reported that the greater portion of the elevated plains and other basaltic hills on the Spring and Sailors Creeks, and from thence downwards long Jim Crow Creek through Franklinford towards Yandoit were occupied, and that fresh tunnels were going in at short intervals. By the late 1860s the intensity of the mining along Spring Creek would have waned and, with European miners increasingly being attracted towards the quartz mining industry, the workings would have become the realm of persevering Chinese miners.

References Mining Surveyors *Quarterly Reports*, February 1860; May 1861; and June 1889.
Maddicks, Henry T., *100 Years of Daylesford Gold Mining History*, pp30-32.

DESCRIPTION & INTERPRETATION OF FEATURES:

The Breakneck Gorge Gold Puddling Site is located on the steep northern bank of Spring Creek, immediately below the base of a basalt escarpment. The site consists of the remnants of one puddling machine complete with stone retaining walls. The site is a good characteristic example of the puddling technology developed in Victoria from 1854 in response to the need to process enormous amounts of clayey soil which needed to be broken up to get at the gold. Horses were used to drag harrows around a circular ditch in which the soil and water were mixed.

Puddler. Below walking track (old water race) is a benched platform containing a weathered 18 ft puddler. The puddler has no pivot post or slabbing and the inner mound is beginning to merge with the puddling trench. The platform is benched by a 10 ft high stone wall. The rear of the puddling platform is also stone retained.

Adits. Collapsed and overgrown adits above the puddling machine site.

INTEGRITY/CONDITION: Well preserved stone-retaining platform but puddler is beginning to weather badly. Non recent disturbance.

CULTURAL SIGNIFICANCE:

The site has:

Historical significance—The Breakneck Gorge Gold Puddling Site is historically important as a characteristic and well preserved example of a site associated with the earliest forms of gold mining which, from 1851, played a pivotal role in the development of Victoria. Puddling machine technology is particularly important in the history of Victorian gold mining as the only technology or method developed entirely on Victorian goldfields.

Scientific significance—Rare type of site, puddler associated with mining of sub-basaltic gravels. The Breakneck Gorge Gold Puddling Site is particularly important because it was part of a deep lead mining operation. The gold seekers at this site were tunnelling under the

basalt to get to the gold bearing sediments of an ancient river system. Remains of these small-scale deep lead mines are now very rare in Victoria.

Archaeological significance—The Breakneck Gorge Gold Puddling Site is archaeologically important for its potential to yield artefacts which will be able to provide significant information about the cultural history of gold mining and the gold seekers themselves.

Network values—Associated with water race, which has now been utilised as a walking track.

SIGNIFICANCE RANKING: Site Listed Victorian Heritage Register.
 Site Listed Heritage Inventory.

Assessed by: **David Bannear 1998**

PLACE NO. & NAME: 3.0 Ajax Company

HI NO: 3.0 H7723-0195

LOCATION: East of Ajax Road, opposite current rubbish tip
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

The Ajax Company commenced mining in 1905 and the mine's regular and profitable gold production helped cause a strong revival in mining in the Daylesford district. The company erected a 10-head battery, which was later upgraded to a 20-head battery. A large compound condensing engine drove the battery. In 1906, the mine's production made it one of the chief quartz gold-producing mines in the State. The company paid its first dividends in 1907 and maintained a healthy gold production until the 1920s. The mine closed down and its plant was auctioned in 1929. During this time, the company had crushed 223,168 tons for a yield of 102,110 ounces, and paid out dividends of £149,437. At the time of the company's closure its shaft had reached a depth of 1240 feet.

References Department of Mines, *Annual Reports*, 1905 and 1906.
 Maddicks, Henry T., *100 Years of Daylesford Gold Mining History*, pp34-36.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mining machinery foundations. The foundations, which are immediately east of the road, are obscured by thick blackberry, broom and firs. Difficult to establish what survives but does appear to be a large U shaped brick winder bed, a narrow brick engine bed, and some smaller concrete mounting beds. Battery. Very large brick battery engine bed, 35 ft x 4 ft, and 10 ft high. All mounting bolts have been removed and the end of the bed has been partly demolished. Running south from the engine bed are some ground-level concrete foundations, which are most probably the foundations for the stamping battery. The concrete stamper foundations are largely buried by tailings. The length of the foundations (over 40 ft) suggests 20-head of stamps.

INTEGRITY/CONDITION: Brick winding engine beds are in good condition but battery engine bed has been partly demolished. Stamper foundations are largely buried by tailings. An area around the foundations has been bulldozed.

CULTURAL SIGNIFICANCE:

The site has:

- Scientific significance*—large engine mounting beds and archaeological potential.
- Archaeological potential*—possible.
- Network values*—part of the Ajax-Nuggetty network of sites.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear 1998.

PLACE NO & NAME: 4.0 Nuggetty Ajax Company

HI NO: 4.0 H7723-0659

LOCATION: Corner of Ajax Road and Midland Highway, Daylesford
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

Nuggetty Ajax Company was floated to work the Nuggetty and Ajax lines of reef. In 1905 the company installed a powerful winding plant over an old disused shaft (the former Nuggetty Company's shaft) and by 1907 were crushing ore in their own 10-head battery. The company's mining operations were relatively unsuccessful despite undertaking considerable underground developmental work. The mine closed down in the early 1920s, the company having sunk the shaft to a depth of 942 feet.

References Maddricks, Henry T., *100 Years of Daylesford Gold Mining History*, pp34-36.
Department of Mines, *Annual Reports*, 1905, 1907, and 1918.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mining machinery. Large brick engine bed, 25 ft x 3 ft, standing 10 ft with adjoining winder bed, 12 ft x 6 ft. All mounting bolts have been removed.

Battery site. Immediately south of the brick beds are some largely buried concrete footings—possible stamper foundations.

To the north of the brick beds is an arrangement of small concrete mounting beds. High grass and a fallen tree obscure the beds.

Mullock heap. Abutting the arrangement of small concrete beds is a large, partly quarried dump, which is covered by dense scrub.

Water dam. Below the mine site is a large (full) water dam.

INTEGRITY/CONDITION: Well preserved brick and concrete foundations but the rest of the site has been flattened. The site has some archaeological potential.
No recent disturbance.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—well preserved range of foundations; the site also has some archaeological potential.

Archaeological potential—possible.

Network values—part of the Ajax-Nuggetty network of sites, and also a landscape feature.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO. & NAME: 5.0 North Nuggetty Ajax Company

HI NO: 5.0 H7723-0660

LOCATION: West of Ajax Road, south of current Daylesford rubbish tip
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

The North Nuggetty Company was floated to work the northern portion of the Nuggetty Ajax Company's lease. The North Nuggetty commenced sinking in 1909 and mined profitably until 1917. After this, the company was mainly occupied with unprofitable developmental work, which eventually led to its demise in 1926. From 1909 to 1917 the mine produced 48,000 ounces of gold and the company paid out £57,000 in dividends. The company had a 15-head battery and were the first mining company at Daylesford to generate its own electricity. A disastrous fire in 1914 destroyed the winding engine and housing, as well as the housing over the boilers and air compressing plant. The company erected a new winding and air compressing plant, and installed a suction or producer gas plant to drive the compressing plant and stamp battery. The introduction of suction gas was a measure in economy to counter a general decline in the gold content of the ore being extracted.

References Maddricks, Henry T., *100 Years of Daylesford Gold Mining History*, pp34-36.
 Department of Mines, *Annual Reports*, 1909, 1914, and 1915.

DESCRIPTION & INTERPRETATION OF FEATURES:

The mine site has an extensive range of foundations. All other components, such as shaft and mullock heap, have been removed and the ground rehabilitated.

Mining machinery. Arrangement of concrete winding engine beds--three distinct types: set of narrow beds (24 x 3 ft, standing 5 ft, set 3 ft apart, and all mounting bolts removed); H-shaped bed (18 ft x 16 ft, ground level); and set of narrow beds (18 ft x 4½ ft, set 8 ft apart, standing 2 ft with 1¼ inch mounting bolts).

Battery. To the west of the concrete winding engine floors are two levels of concrete floors. The upper floor (25 ft x 20 ft) has two sets of timber mortar blocks and 2 inch tie bolts (foundations for 10-head of stamps). The southern side of the floor has been demolished--most probably this section of the floor would have contained foundations for another 10-head of stamps. On the north side of the upper floor are some largely buried brick engine beds. The lower floor (45 ft x 25 ft) has some drains and has been partly demolished.

Gas-producer engine. At the southern end of the stamper foundations is an arrangement of concrete mounting beds. There are two large beds, each 10 ft x 4 ft, standing 6 ft high with 1¼ inch mounting bolts. Located between the two large beds are four smaller beds (each 6 ft x 2 ft, 6 ft high with 1½ inch mounting bolts). In front of beds is an 8 ft square concrete U-shaped bed (with ¾ inch bolts); and to the

south are two brick (concrete rendered) gas producer foundations (each measuring 18ft x 3½ft). The gas-producer foundations have several small sumps or pits.

INTEGRITY/CONDITION: Concrete beginning to weather badly. Considerable bulldozing around the foundations.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—extensive range of mining and battery foundations.

Archaeological potential—yes.

Network values—Part of the Ajax-Nuggetty network of sites, and also a landscape feature.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO. & NAME: 6.0 North Maxwell Company

HI NO: 6.0 H7723-0661

LOCATION: Pitchers Reef, off Western Avenue, east side of Doctors Gully, Daylesford
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Road Reserve

SITE HISTORY:

In the late 1930s, the success of the Maxwell Consolidated Company in working a reef on the eastern slope of Doctors Gully caused a revival of interest in other abandoned shafts in the gully. Pitchers Reef, to the north of the Maxwell's ground was re-opened as the North Maxwell. This company installed a steam winding plant and re-timbered the shaft down to 100 feet. The company worked with little success until 1942.

References Maddicks, Henry T., *100 Years of Daylesford Gold Mining History*
Department of Mines, *Annual Report*, 1938.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mining machinery. Foundations located on edge of road, set in an excavated platform. Foundations consist of a largely buried 8 ft square concrete winder bed; 10 ft x 3 ft engine bed and a 20 ft long concrete boiler setting.

INTEGRITY/CONDITION: Good. No recent disturbance.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—intact foundations.

Network values—North Maxwell—Maxwell Consolidated—Daylesford Pyrites Works (local significance)—Ophir Company.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO. & NAME: 7.0 Maxwell Consolidated or Just In Time

HI NO: 7.0 H7723-0662

LOCATION: Eastern slope of Doctors Gully, West of Daylesford-Hepburn Road, Daylesford
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

During the Great Depression (early 1930s) the price of gold rose from £4 to £8 an ounce. The conditions of the times, and the massive price rise, caused a mining revival throughout the State. The key company in the mining revival at Daylesford was the Maxwell Consolidated. This company was vigorously prospecting in 1936 and by 1938 had installed a large mining and crushing plant. Rich crushings in the same year enabled the company not only to pay off a joint State and Commonwealth prospecting loan, but also to distribute a small dividend to its shareholders. The following two years brought increased success: £13,743 distributed in dividends in 1939, and £27,486 in 1940. The profits enabled the company to install more plant, including a cyanide works. The company's production declined in 1941, and from this time onwards, until its close in the early 1950s, was engaged in mainly unprofitable and unproductive developmental work. In 1949 the company installed a diesel driven compressor and in 1950, the company changed hands and was known as the Aurora Company. The new company overhauled the winding plant.

References Department of Mines, *Annual Reports*, 1936-1941, 1949, 1950.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Mullock heap has been partly quarried and flattened.
 Battery. Adjoining brick engine beds--solid bed, 13 ft x 4 ft; and a tank-like bed 13 ft x 5½ ft, standing over 6 ft high. The latter bed is covered with sheets of galvanised iron and used as a cubby house. Both beds are constructed of machine-made red bricks set in concrete mortar.
 Stamper foundations (10 head). On the northern side of the beds are two levels concrete floors. The upper floor has two set of timber mortar blocks and associated tie bolts. The stamper foundations and lower floor are overgrown by blackberries.
 Mining machinery. To the east of the battery are the remains of the mine's engine house--a 36 ft x 30 ft concrete floor containing an arrangement of concrete mounting beds. The largest of the beds is 19 ft x 9 ft, and has 1½ inch mounting bolts. There is a 20 metre wide mass of blackberries between the mining machinery and battery foundations.
 Shaft. Filled shaft.
 Cyanide works. To the south of the shaft, largely covered by tailings, are cyanide vat footings—a rectangular arrangement of concrete footings, 60 ft x 12 ft, with ¾ ft thick walls and four compartments. The dump of tailings extends for some distance from the eastern wall. The area is overgrown.

INTEGRITY/CONDITION: Excellent state of preservation, site is very overgrown.

CULTURAL SIGNIFICANCE:

The site has:

- Historical significance*—The Maxwell Consolidated Gold Mine is historically and scientifically important as a characteristic example of an important form of gold mining. Gold mining sites are of crucial importance for the pivotal role they have played since 1851 in the development of Victoria. It was the main mine of Daylesford 1930s mining revival.
- Scientific significance*—As well as being a significant producer of Victoria's nineteenth century wealth, quartz mining, with its intensive use of machinery, played an important role in the development of Victorian manufacturing industry. The site stands has extensive and well preserved foundations and, as such, is a fine example of 1930s mining revival technology.
- Archaeological potential*—The plant surviving at these mines forms an important reference point for an understanding of the technological history of gold mining.
- Network values*—North Maxwell—Maxwell Consolidated—Daylesford Pyrites Works (local significance)—Ophir Company.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO. & NAME: 8.0 Ophir Company

HI NO: 8.0 H7723-0663

LOCATION: Head of Lloyds Gully, upstream of Daylesford Pyrites works
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

In the late 1930s, the success of the Maxwell Consolidated Company in working a reef on the eastern slope of Doctors Gully caused a revival of interest in other abandoned shafts in the gully. The old Ophir shaft was one of these, which appears to have been worked by the Excelsior Gold Recovery. In 1936 this company were reported as having just completed the erection of an up-to-date battery and cyanide plant.

References Maddicks, Henry T., *100 Years of Daylesford Gold Mining History*, pp47-48
 Department of Mines, *Annual Report*, 1936

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Large heap with flattened top.
 Mining machinery foundations. In the gully below the heap is an 8 ft square concrete winder bed with ¾ inch mounting bolts. To the south is a filled shaft site and one concrete poppet leg pad.
 Battery (10 head of stamps). The battery foundations are hidden by high broom.
 Below the winder bed are three levels of concrete floors. The 30 ft square upper floor has a set of concrete mortar blocks and tie bolts, and a concrete engine bed, 5½ ft x 4 ft with 1½ inch mounting bolts. The middle and lower floors (overall measurement 40 ft x 30 ft) are partly buried.
 Slum pond. Below the battery is a 40 ft long winged-embankment, which is retained with stone on both Faces.
 Water dam. Next to the slum pond is a dry dam.

INTEGRITY/CONDITION Well preserved foundations, which are completely hidden by broom.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—well preserved foundations.

Archaeological potential—yes.

Network values—North Maxwell—Maxwell Consolidated—Daylesford Pyrites Works (local significance)—Ophir Company.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear:

Date 1998

PLACE NO. & NAME: 9.0 Rising Star Company

HI NO: 9.0 H7723-0665

LOCATION: Blind Creek, Daylesford
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

In 1877, Rollieri & Massiminos party discovered the Rising Star line of reef. The company, formed to work the successful prospect--the Rising Star Company--became a major gold producer, and caused a quartz mining boom at Blind Creek. Other companies formed, who worked with some success, were the South Star, North Star, and Western Star. The Rising Star Company operated until 1886. The company initially installed a small battery of 8-heads of stampers, but by 1880, were erecting pumping and winding machinery, as a well as a new battery, a 15-hp engine and 16-heads of stampers. The company's stamping power was increased in 1881 with an additional 12-heads. By the end of its career, the company had a mining plant comprising seven boilers, five engines, a 28-head battery, and seven Halley's patent percussion tables for treating pyrites; and up to January 1886, had sunk the main shaft to a depth of 630 feet, obtained 33,000 ounces of gold, and had paid out £43,920 in dividends to its shareholders.

References Mining Surveyors *Quarterly Reports*, September 1868; June 1880; March 1881; September 1881; and June 1883.
 Bulletins of the Geological Survey of Victoria, No. 29, *Some Daylesford Mines*, pp.9-10.
 Maddicks, Henry T., *100 Years of Daylesford Gold Mining History*, pp.37-38.
 Department of Mines, *Annual Report*, 1906.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Large intact heap with one main 50 metre long dump and several short lines. The shaft has been filled.
 Mining machinery. Large brick engine mounting bed, at least 26 ft x 10 ft, with two rows of 2-inch mounting bolts. The front of the engine bed has been demolished.
 Dams. In the gully downstream from the mine are two large (breached) embankments.

INTEGRITY/CONDITION: Engine bed and mullock heap in good condition.

CULTURAL SIGNIFICANCE:

The site has:

- Historical significance*—major mine and pioneering of the Star group of mines.
- Scientific significance*—intact heap with large brick engine bed.
- Archaeological potential*—yes.
- Network values*—Specimen Hill-Rising Star group of quartz mining sites.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO & NAME: 10.0 North Star Reef Workings

HI NO: 10.0 H7723-0666

LOCATION: West bank of Blind Creek
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

In 1877, Rolleri & Massiminos party discovered the Rising Star line of reef. The company, formed to work the successful prospect--the Rising Star Company--became a major gold producer in 1880, which caused a quartz mining boom at Blind Creek. One of the companies formed during the 1880 boom, who worked with some success, was the North Star. The North Star Company commenced mining with a 16-head stamping battery to which, in 1886, was added an additional 10-head. The new battery, along with a 25-hp engine, was purchased from the Egyptian Company at North Drummond. The new battery was reported as being erected near the company's existing mill.

DESCRIPTION & INTERPRETATION OF FEATURES:

Whim shaft. Intact large heap with two 30 metre long dumping lines with a well defined, 35 ft diameter, whim platform.

Whim shaft and workings. Intact heap with one 25 metre dumping line, open shaft and whim platform. Other associated workings include a long costean and patch of shafts and small mullock paddocks.

INTEGRITY/CONDITION: Good.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—rare type of site, well preserved whim shaft with unusually large mullock heaps.

Network values—Specimen Hill-Rising Star group of quartz mining sites.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO. & NAME: 11.0 Rising Sun Company

HI NO: 11.0 H7723-0667

LOCATION: West side of Blind Creek, near junction of Frenchmans Gully and Blind Creek

MUNICIPALITY: Hepburn Shire

LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

Around 1868, the Rising Sun Quartz Mining Company, formerly Veal and party, erected steam-powered mining machinery to work Frenchmans Reef, which was located in Blind Creek, near Specimen Hill. It appears to have been a short-lived venture and it was not until the discovery of the Rising Star line of reef by Roller & Massiminos party in 1877, that the Blind Creek area experienced any significant mining.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Intact heap with two main dumping lines and several short lines. The shaft has been filled.

Mining machinery. At the rear of the mullock heap is a large excavated platform, which is covered by thick blackberries. Stone foundations visible on the platform but cannot be measured or photographed.

Whim shafts. Two whim shafts, one is located between the mullock heap and the junction of Blind Creek and Frenchmans Gully; the other is located between the Rising Sun and South Star mines. Both have well defined whim platforms, open shafts and small mullock heaps. The latter whim is relatively free of vegetation.

INTEGRITY/CONDITION: Good, but relics overgrown.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—Range of features.

Archaeological potential—yes.

Network values—Specimen Hill-Rising Star group of quartz mining sites.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO. & NAME: 12.0 Old Specimen Hill

HI NO: 12.0 H7723-0668

LOCATION: Along dismantled Daylesford to Ballarat railway line, off Specimen Hill Track, Daylesford

MUNICIPALITY: Hepburn Shire

LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

A sluicing party (Woodburn, Fullarton & party) discovered the Specimen Hill Reef in 1857. For several years the reef was worked on a small scale, but in the mid 1860s the Specimen Hill Company was organised and a large amount of ground was taken up by the company. The company worked profitably for a number of years, realising nearly a ton weight of gold. The company installed substantial new plant in 1869, when a large body of quartz was struck at the 349-ft level, which contained large quantities of iron pyrites; 20 tons of which yielded 55 ounces of gold. Another good shoot of gold was also struck in March 1878, at the 460-ft level. The Specimen Hill Company ceased mining in 1880 and the ground remained abandoned from then until the Victorian Star Company acquired the lease in 1906.

During the years 1867 to 1880 inclusive, the company crushed 88,339 tons of quartz for 24,985 ounces of gold. The company's shaft reached a depth of nearly 600ft.

Machinery installation on the Specimen Hill

1866 The Specimen Hill Co. engaged in procuring and erecting additional powerful machinery.

1869 Specimen Hill Quartz Mining Co. 17 heads of stampers, Hungarian mills, Chilian mill, and buddle; and also the furnace.

1876 The Specimen Hill Company is erecting a fourth engine (winding).

References Department of Mines, Mining Surveyors *Quarterly Reports*, June 1866, December 1869, June & December 1876, December 1868, and June 1889.

Department of Mines, *Bulletins of the Geological Survey of Victoria*, No. 42, 1923, pp.82-85.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. 200 metres to the north-east of New Specimen Hill is a large intact mullock heap, which has three dumping lines. Each dumping line is approximately 50 metres long and is completely hidden by broom.

Machinery site. At the rear of the mullock heap, covered by thick broom is a large spread of brick, stone and mortar rubble.

INTEGRITY/CONDITION: Intact heap, footings buried by rubble. The site is almost totally obscured by broom.

CULTURAL SIGNIFICANCE:

The site has:

Archaeological potential—yes.

Network values—part of the Specimen Hill-Rising Star group of quartz mining sites.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO. & NAME: 13.0 New Specimen Hill

HI NO: 13.0 H7723-0669

LOCATION: Along dismantled Daylesford to Ballarat railway line, off Specimen Hill Track, Daylesford
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

In 1906, the Victorian Star G. M. Co. (an English company) took up a large area of the ground which took in the Rising Star and Specimen Hill lines of reefs. The company immediately erected powerful winding and pumping plant; and in 1909, also installed a 20-head stamping battery. Most of the mining plant appears to have been located on Specimen Hill, near the Old Specimen Hill Company's shaft. The Victorian Star Company worked with barely payable results until 1911. The company then closed down, selling off part of its lease, including all the plant thereon (consisting of winding and crushing machinery) to the New Specimen Hill Company. The latter company mined with equal non-success and in 1914 ceased operations and sold the mine and plant.

Machinery

Boiler plant of three Cornish boilers, 26 ft x 6½ ft; wooden poppet head, 75 ft high; winding done by means of a double-cylinder 10-inch winch; and 20-head battery, four Wilfley tables, a 40-ft canvas table, and a Wheeler pan.

References Dept of Mines, *Annual Reports*, 1906, 1097, 1909, 1911, and 1914.
 Dept of Mines, *Bulletins of the Geological Survey of Victoria*, No. 42, 1923, pp.82-85.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Large peaked mullock heap, approximately 70 metres wide and 30 metres high. Shaft has been filled.

Battery site. On the north side of the heap are two floor levels. The upper floor (approximately 60 ft x 30 ft) has two sets of partly burnt mortar blocks and associated tie bolts, and at least two other sets which are completely covered by thick blackberries. Earth, etc largely buries the lower floor (same size).

Mining machinery. To the east of the heap, opposite side of the track, is a very overgrown machinery site. It is just possible to make out the outlines of some concrete footings. There is also a scattering of red brick.

INTEGRITY/CONDITION: Foundations of mining machinery and battery are either obscured by scrub or buried by rubble.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—range of mining relics.

Archaeological potential—yes.

Network values—one of the focal points of the Specimen Hill-Rising Star group of mining sites.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO. & NAME: 14.0 Long Tunnel Co. (Former Great Tunnelling Company)

HI NO: 14.0 H7723-0670

LOCATION: South side of Patterson Street, Daylesford
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Unreserved Crown land

SITE HISTORY:

Alluvial mining in the Daylesford (formerly Jim Crow) goldfield commenced in 1853 when rich and extensive alluvial deposits were discovered underlying the thick basaltic or volcanic lava deposits capping the basaltic hills in the neighbourhood of the town and along Spring Creek. The miners tunnelled under the basalt cap and obtained gold from ancient river gravels. These gravels had been deposited in the Tertiary period, up to forty million years ago. The auriferous wash retrieved was treated in puddlers or sluice boxes, and the tailings (river pebbles) were deposited in heaps at the base of the escarpment. The water for treating the gold-bearing wash was conveyed to the scene of the mining operations in races.

Swiss-Italian miners reputedly discovered Italian Hill in 1854 and by the 1860's, like many of localities in and around Daylesford, Italian Hill was being extensively tunnelled. The most significant venture on Italian Hill, in terms of its duration and total length attained by the tunnel, was commenced in 1860 by a party led by Paganetti. The tunnel was later worked by the Great Tunnelling Company, Long Tunnel Company, Fumberger and party, and Long Tunnel Co-operative Company. By 1875, the tunnel had been driven 2,800 feet, and by 1906 had been driven to a distance around 5,000 feet.

- 1860 Tunnelling--Italian Hill on Wombat Creek.
- 1861 Tunnelling--In Italian Hill a considerable number of miners are now engaged.
- 1869 The Great Tunnelling Co., Italian Hill, is now ready to commence operations.
- 1870 The Great Tunnelling Co. is in 1,515ft.
- 1874 The Long Tunnel, formerly Great Tunnelling Co., Italian Hill, has recommenced and is laying down a substantial tramway and iron rails.
- 1875 Long Tunnel is in 2,800 feet, has payable wash.
- 1885 Wombat Hill race is at present rented by Fumberger and party, for the Long Tunnel.
- 1906 The Long Tunnel Co-operative Company, finding it impossible to continue working in a tunnel which is about 5,000 feet long.
- 1930s Long Tunnel--Water from the tunnel was used in the State Government battery ... Walker's worked the tunnel in the 1930s.

References Maddicks, Henry T., *100 Years of Daylesford Gold Mining History*, pp.16-18.
 Mining Surveyors *Quarterly Reports*, February 1860, July 1861, June 1869, June 1870, September 1874, June 1875, and June 1885.
 Department of Mines, *Annual Report*, 1906.

DESCRIPTION & INTERPRETATION OF FEATURES:

Adit. Open adit with large partly quarried mullock heap. The heap and adit are obscured by vegetation.

CONDITION OF FEATURES: Adit overgrown. Mullock heap has been partly quarried.

CULTURAL SIGNIFICANCE:

The site has:

- Historical significance*—One of Daylesford's most famous alluvial tunnels. Also an extremely long tunnel in State terms.
- Scientific significance*—Intact adit.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO. & NAME: 15.0 Commissioners Reef

HI NO: 15.0 H7723-0671

LOCATION: Hepburn Road to Midland Highway; north east of Jacksons Lookout, Hepburn Springs
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

Commissioners Reef was opened up in the late 1850s by a Swiss-Italian miner named Vincent Perni. The mine was first worked as an open cut and later by shaft mining. The latter type of mining commenced in 1859, when the Cosmopolitan Company (a Clunes based mining company) obtained a good prospect from the reef and installed machinery for underground mining.

References Maddicks, Henry T., *100 Years of Daylesford Gold Mining History*, p.11.
 Mining Surveyors *Monthly Report*, August 1859.

DESCRIPTION & INTERPRETATION OF FEATURES:

Reef workings. Workings run north along the spur and consist of some shallow open cutting, filled shafts and partly dozed mullock paddocks. On the eastern side of the spur are two open adits and a well defined whim platform, which is associated with a filled shaft and small open stope. There are two collapsed adits on the western side of the spur.

Mullock heap. At the base of the spur is a large, partly quarried mullock heap with three main dumping lines. Jacksons Look-out walking track passes quiet close to the heap.

Machinery site. On the eastern end of the heap is a machinery site--an excavated platform that is completely covered by blackberries. Near the platform are the remains of a small stone building.

Open cut. Running up the side of the spur to the north of the mullock heap is a large, partly collapsed open cut (according to local miner, Rod Kirby, this is the largest open cut in the Daylesford area). The shallow workings continue to the next gully where there is a large embankment with stone by-pass.

CONDITION OF FEATURES: Range of features, variable condition.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—a range of features, including a large mullock heap and open cut.

Archaeological potential—yes.

Network values—the mining relics lie near the Jacksons Look-out walking track.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO. & NAME: 16.0 Eureka Reef Workings

HI NO: 16.0 H7723-0672

LOCATION: Eureka Reef workings, between Spring Creek and Welshmans Gully, Hepburn Springs
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

Eureka Reef's main period of mining appears to have been the 1870s. In 1874, the Eureka Quartz Mining Company was reported cutting a haulage tunnel from their underground workings to Welshman's Gully. The company also installed a battery during this time; presumably this would have been placed near the adit. The company's operations were short-lived; in 1876, its steam engine was purchased and removed by the South Argus Company.

References Mining Surveyors *Quarterly Reports*, March 1874 and December 1876.

DESCRIPTION & INTERPRETATION OF FEATURES:

Workings. Running north along the spur are a number of open shafts/intact mullock paddocks and some shallow open cutting. On the eastern side of the spur are a number of levels of adit workings. Tracks. Associated with the adits are at least three levels of benched tracks. Following the tracks northwards, up the Welshmans Gully, takes you to the Wonderful Reef workings. Hut site. One stone fireplace was observed on the walk to the Wonderful Reef workings.

INTEGRITY/CONDITION: Range of mining features, no visible machinery foundations.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—range of features.

Archaeological potential—yes.

Network values—Eureka Reef—Wonderful Reef mine and workings—Perrins Reef workings—Fern Hill Lead mine.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO. & NAME: 17.0 Wonderful Reef Mine

HI NO: 17.0 H7723-0673

LOCATION: Wonderful Reef mine and workings, head of Welshmans Reef Gully, Hepburn Springs
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

The reef running along Wonderful Creek was briefly worked with considerable success during the mid 1860s. Daylesford's mining register lists the Wonderful Reef Company as one of the main gold producers during 1864-1865. In March 1867, the company was engaged in sinking a pumping and winding shaft, and reported contemplating adding an additional 12-head of stampers to the crushing mill. The company was defunct by 1872, when a new company (bearing the old name) was re-fitting the plant. The re-formed company was short-lived.

During the 1880s, Wonderful Reef was being worked by at least two companies; namely, the Morning Light Quartz Mining Company, which erected a 8-head battery; and the Electric Light Quartz Mining Company, which cut a tunnel in some 289 feet from the creek in the hope of intersecting the reef.

The reef's last major mining venture was floated in 1889 when the Wonderful Quartz Mining Company was reported issuing 24,000 shares, with the intention of using the capital raised to fix powerful machinery at the mine.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Large intact mullock heap with two main dumping lines. The shaft has been filled.

Machinery site. To the west of the shaft is an excavated platform that is overgrown by thick ferns. On the platform are the remains of a 24 ft long boiler setting, some stone engine mounting beds and a scatter of red bricks. The foundations are partly buried and covered by ferns (could not be measured).

Battery site. To the south of the mining machinery foundations is another overgrown platform which is associated with a small dam or battery tank.

Water dam. A water race runs upstream from the battery tank to a large dry dam.

Wonderful Reef workings

Whim platforms. Shallow reef workings run along the west side of Welshmans Reef Gully, either side of mine site. Along the line of workings are at least three well defined whim platforms (all approximately 36 ft in diameter and associated with shafts and intact small mullock heaps). Two of the whims are south of the large mullock heap; the other lies to the north. Near the northern whim platform is another large dry water dam.

INTEGRITY/CONDITION: Range of relatively undisturbed mining relics. The site, especially the machinery foundations, is overgrown.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—Well preserved line of quartz reef workings with an range of different features including open cuts, adits, benched tracks, hut site, mining foundations and whim platforms.

Archaeological potential—yes.

Network values—Eureka Reef—Wonderful Reef mine and workings—Perrins Reef workings—Fern Hill Lead mine.

Natural values—Wonderful Reef workings have an evocative abandoned look, with little disturbance.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO. & NAME: 18.0 Perrins Reef Workings

HI NO: 18.0 H7723-0674

LOCATION: West of Midland Highway, head of Welshmans Gully, Hepburn Springs
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:
No historical information found.

DESCRIPTION & INTERPRETATION OF FEATURES:

Deep lead mine, Fern Hill lead.
Adit. Open adit with intact mullock heap.

Perrins Reef workings

Reef workings. On the spur above the alluvial adit is a line of reef workings. The workings include 6 shafts (filled but now subsided) and their partly bulldozed mullock paddocks, some shallow open cutting, and one blacksmith's forge. In the gully, to the south, is a collapsed adit, intact heap and remains of blacksmith forge. The line of reef workings continues south (similar types of features) and ends with at a well preserved whim shaft--open shaft, intact mullock heap and 36ft diameter whim platform.

INTEGRITY/CONDITION: Range of features, but sections of the mine workings have been bulldozed.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—line of shallow reef workings.

Network values—Eureka Reef—Wonderful Reef mine and workings—Perrins Reef workings—
Fern Hill Lead mine.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO. & NAME: 19.0 Fern Hill Deep Lead Mine

HI NO: 19.0 H7723-0675

LOCATION: West of Midland Highway, head of Argyle Gully, Hepburn Springs
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Freehold Land

SITE HISTORY:

In the late 1860s, the deep lead running north-easterly from Wombat Hill was being progressively traced towards Coomara. In 1867, a tributary to the main lead was prospected and traced to its source at Fern Hill. Several companies, including Fern Tree Hill, Galatea Gold Mining, and Newton No. 2, commenced to work the Fern Hill Lead during the late 1860s to the early 1870s. The mining operations conducted on the lead were relatively small-scale, eg. the Fern Hill Tree Company installed a 10-hp engine and 6-head battery, and the Galatea Company erected a whim and puddling machine.

References Mining Surveyors *Quarterly Reports* December 1867, March 1868, and September 1874.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Intact mullock heap with 100 metre long dumping lines and two short lines. The adit has collapsed and runs water.

Water dam. Near the adit is a small silted water dam.

Puddler. On the north side of the heap on the other side of the gully, is a weathered 22 ft diameter puddler with small pebble dump.

INTEGRITY/CONDITION: Good, but puddler beginning to erode and become overgrown by blackberries.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—rare type of site, relatively intact small scale deep lead mine with alluvial adit and puddler.

Network values—Eureka Reef—Wonderful Reef mine and workings—Perrins Reef workings—Fern Hill Lead mine.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO. & NAME: 20.0 Beehive Mine And Workings

HI NO: 20.0 H7723-0676

LOCATION: West of Midland Highway, Beehive Gully, Hepburn Springs
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

Alluvial mining in the headwaters of Middletons Creek (known as the Dry Diggings) during the late 1850s, led to several shallow quartz reefs, including Beehive, Sportsman, and Parkers Specimen, being opened up. Several shafts sunk on these reefs found extremely rich gold down to 100 feet. Mining beyond this depth proved to be unprofitable.

Beehive Reef was being worked by Thomas and Company in 1860. This company did not erect its own crushing mill, but was carting its ore to Mr. Wilson's machine on Middletons Creek. The only relatively large scale attempt at mining Beehive Reef was undertaken during the early 1900s. In 1906 the Mikado Company installed a steam-powered winding winch and erected a poppet head over an old shaft. This shaft was de-watered and cleaned out to 150 feet. The company could not mine profitably, and in 1909 the Beehive Company took over the lease and erected a crushing battery. This company was equally unsuccessful.

DESCRIPTION & INTERPRETATION OF FEATURES:

Shallow workings. North side of Beehive Gully is an open shaft, intact mullock paddock and a shallow open cut. The ground either side of the open cut has been deeply surfaced.

Mining machinery site. On the opposite side of the gully is a large intact mullock heap with three dumping lines. Associated with the heap is a benched platform, which has a filled (partly subsided) shaft, traces of decayed bedlogs and a spread of red bricks. Near the heap is a partly filled stope.

Battery. 50 metres to the south of the mine is a benched platform (36 ft x 30 ft) which contains a collapsed wooden battery framework, set of standing wooden horses or pedestals (wooden engine mounting bed), and a partly demolished stone boiler setting. The wooden horses are each 13 ft long and stand 3 ft. The surviving wall of the stone boiler setting is 30 ft long and 2 ft thick.

Tailings dump. Partly quarried dump in the gully below the battery site.

Hut sites. To the east of the battery, on a small flat, are the remains of at least three stone fireplaces. *Beehive Gully adit--north side of Beehive Gully [7723-3-1: 472.692].*

Adit. Open adit with large intact dump with three 50 metre long dumping lines. The adit connects to an air shaft.

Hut site. To the west of the adit, on a low spur is a stone fireplace-hut platform, open shaft and intact mullock paddock.

Alluvial workings. Beehive Gully has been deeply sluiced.

INTEGRITY/CONDITION: Timber framing of battery in fair condition. Well preserved adit and associated hut site.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—Range of features, including some wooden framework and a relatively well preserved boiler setting.

Archaeological potential—yes.

Network values—Beehive mine and workings—Parkers Specimen Reef mine and workings—Hunts Dam and race.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998

PLACE NO & NAME: 21.0 Specimen Parker Reef Mine And Workings

HI NO: 21.0 H7723-0677

LOCATION: Off track running west from Midland Highway, opposite Sawpit Gully Road, Dry Diggings
MUNICIPALITY: Hepburn Shire
CURRENT LAND USE: Hepburn Regional Park

SITE HISTORY:

Alluvial mining in the headwaters of Middletons Creek (known as the Dry Diggings) during the late 1850s, led to several shallow quartz reefs, including Beehive, Sportsman, and Parkers Specimen, being opened up. Several shafts sunk on these reefs found extremely rich gold down to 100 feet. Mining beyond this depth proved to be unprofitable.

Parkers Specimen Reef was one of the oldest quartz workings in the Daylesford division. Its main period of mining appears to have spanned the late 1850s to late 1860s:

- 1859 Parker's Specimen Reef, head of Dry Diggings (geological map, No. 1 a, east).
 Claim No. 1--said to have produced £3,000 for a length of 80ft.
 Claim No. 2--Best on the line; yielded as much as 70 oz. per ton near the surface, and having presented its owners with £10,000 ... tunnel and tramway, and burning kiln.
 Claim No. 3--Kiln, tramway to Mr. Wilson's crushing machine on Middletons Creek. Claim is 45 ft long and produced £3,000 to £4,000.
 Parker's Specimen Reef and Sportsman's Reef (probably a continuation of the first).
- 1860 Parkers Specimen Reef ... Mr. Wilson, occupying adjoining claim north, established a sawmill in connection with the engine driving his crushing plant.
- 1861 On Parker's Specimen Reef, the Dry Diggings Company has now made arrangements with a party from Sandy Creek to furnish machinery.
 Prince Llewellyn Co, Specimen Parker Reef, erecting machinery ... and has purchased Wilson's race, from Wallowbee Creek to Shepherd's Flat, passing through the company's site for machinery, and dam, for the sum of £115.
 Prince Llewellyn Co ... crushing machine.
- 1868 Parker's Specimen Reef Quartz Mining Co. has purchased the plant, consisting of two engines and battery.

References Mining surveyors *Monthly and Quarterly Reports*, August 1859, December 1859, December 1860, July 1861, September 1861, December 1861, and September 1868.

DESCRIPTION & INTERPRETATION OF FEATURES:

Specimen Parker Reef - south side of track

Mullock heap. Large intact heap with at least ten dumping lines. The shaft has been filled.
 Machinery site. To the south, largely obscured by ferns, are the remains of a stone boiler setting and what appears to be a stone chimney stack base.
 Reef workings. Below the mullock heap, running south, are some extensive shallow workings (open cutting, trenching, adits and filled shafts). The workings are very overgrown.
 Battery site. Directly below the mullock heap is a benched 30 ft square platform which has some decaying bedlogs, protruding iron bolts and a depression left by decaying of mortar blocks. Most probably was 10-head stamper.
 Quartz roasting kiln. Near the battery site is a small below ground kiln, 7 ft wide and about 5 ft deep. The kiln has been excavated into bedrock with a stone and mortar front. The kiln's portal has collapsed.
 Slum pond. In the gully below the battery is a small intact slum pond and remains of large embankment.
 Water race. A well defined race runs along the spur below the mullock heap and above the battery site.
 Track. Benched track runs along the spur and is linked to several benched house sites, one of which still has a stone fireplace.

Specimen Parker Reef - north side of track

Reef workings. Line of workings (mainly open cuts, shafts and costean) continue northwards. There is also one collapsed adit with large intact heap.
 Tracks. At least two levels of benched tracks run along the west side of a gully.
 Battery. The tracks end at a battery site which has the remains of small loading ramp and adjoining

excavated platform with a depression left by decayed mortar blocks (5-head of stamps). There is a boiler setting depression on the north side of the battery.
Slum pond. Below the battery is a small (20 metre wide) intact slum pond.

INTEGRITY/CONDITION: Range of features, mining relics on the south side of the track are very overgrown.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—range of features associated with quartz mining.

Archaeological potential—yes.

Network values—Beehive mine and workings—Parkers Specimen Reef mine and workings—Hunts Dam and race.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 22.0 Hunts Dam And Race

HI NO: 22.0 H7723-0678

LOCATION: North of Mannings Road, Dry Diggings
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

Hunt's water race appears to have been built in two sections. In 1860, Mr Wilson constructed a race which brought water from Wollowbee Creek (now Wallaby Creek) across the elevated plains to Shepherds Flat. This race was some 15 miles long and supplied water for the Dry Diggings goldfield. Mr Wilson also had a battery, which was located on Middletons Creek, which presumably was water-powered. The Prince Llewellyn Co--Specimen Parker Reef, Dry Diggings--for water for their crushing plant and dam, purchased Wilson's race, in 1861, for the sum of £115.

The race also appears to have been referred to as the Kangaroo Creek race: eg. in 1884, the race was supplying water for 15 sluice-heads for sluicing gullies in the Dry Diggings area, and also, for powering a water-wheel battery on Sportsman's Reef. Mr Hunt later extended Wilson's race to Middletons Creek where the water was used to sluice various gullies.

References Maddicks, Henry T., *100 Years of Daylesford Gold Mining History*, pp.42-43.
 Department of Mines, *Mining Surveyors Quarterly Reports*, May 1860, July 1861, June 1864, and December 1884.

DESCRIPTION & INTERPRETATION OF FEATURES:

Dam. Large full dam, which is choked with, weeds. The dam still has remains of wooden valve.
 Water race. Hunt's race runs down the north side of the gully, below embankment. This race is traceable to sluicing works on tributaries of Middletons Creek, south of Vaughan. [Sites recorded in Castlemaine and Fryers Creek Mining Divisions].

CONDITION OF FEATURES: Good.

CULTURAL SIGNIFICANCE:

The site has:

Historical significance—one of Daylesford's major water races.

Scientific significance—well preserved race and dam system.

Network values—Beehive mine and workings—Parkers Specimen Reef mine and workings—Hunts Dam and race. Hunts Dam and water race also linked to several sites at Middletons Creek, in the Fryers Creek mining Division.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 23.0 Kirkhams Reef Mine

HI NO: 23.0 H7723-0679

LOCATION: East side of the Midland Highway, South of Hepburn Road,
Daylesford

MUNICIPALITY: Hepburn Shire

LAND USE/STATUS: Hepburn Regional Park

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Large mullock heap, which is currently being quarried. The shaft has been filled.
Battery (15 head of stamps). To the south of the heap is an excavated platform containing two levels. The upper level (measuring 60 ft x 15 ft) has three sets of timber mortar blocks and 1-½ inch mounting bolts. The lower lever (60 ft square) is covered by earth and low vegetation.
Machinery foundations. Above the stamper foundations is another platform (50 ft x 30 ft) which has an arrangement of decaying bedlogs with 1-½ inch mounting bolts and a possible buried boiler setting.
Shallow workings. Above the mullock heap is a line of shallow reef workings, which have been bulldozed. The main feature is a faint whim platform and small dump.

INTEGRITY/CONDITION: Fair, battery site beginning to weather badly. Mullock heap is being quarried.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—range of features including battery and machinery sites.

Archaeological potential—yes.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 24.0 Bells Reef Mine

HI NO: 24.0 H7723-0680

LOCATION: East off Ryans Track, south of Telegraph Road,
Daylesford

MUNICIPALITY: Hepburn Shire

LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

The first significant mining venture on Bells Reef appears to have commenced in 1880. The mining register reported in December 1880, that the Bell's Quartz Company, Black Jack's, would soon have the battery ready. The register also mentions in his next quarterly report that the company was raising quartz from Bell's Reef.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Small peaked mullock heap (30 metres wide, 5 metres high) with filled shaft.

Mining machinery. 7 ft square concrete winder bed with 1 inch mounting bolts. At the rear of the winder bed is a well preserved concrete boiler setting.

Water dam. North-west of the machinery foundations is a dry dam.

The concrete foundations at Bell's Reef would date from Daylesford's early 1940s quartz mining revival, which was caused by the success of the Maxwell Consolidated Company.

INTEGRITY/CONDITION: Site is overgrown, but foundations are in good condition.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—well preserved foundations.

Archaeological potential—yes.

Network values—Bells Reef mine—Adams Reef workings.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 25.0 Adams Reef Workings

HI NO: 25.0 H7723-0681

LOCATION: German Gully Track, off Bells Reef Road, South-west of Daylesford
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

Adams Reef was a minor line of reef which was opened in the mid to late 1850s. In October 1859, the mining register reported that the "long time deserted" Adams Reef was being taken up by a mining party from Clunes. In 1861, prospectors on the reef were roasting quartz in a kiln prior to transporting the ore to a battery. No other references were found regarding the reef, but the archaeological evidence suggests it was worked on a scale, which included the installation of steam-powered machinery. The reef's main mining period would have been during the 1870s-1880s.

DESCRIPTION & INTERPRETATION OF FEATURES:

Reef workings, north side of track. Group of four open shafts and partly bulldozed mullock paddocks.

Reef workings, south side of the track. Main features are a large mullock heap (3 dumping lines) with fenced shaft; a 3-compartment shaft, the remains of a whim platform and a machinery site (excavated platform and brick rubble); a small peaked heap with machinery site (excavated platform with an arrangement of decayed bedlogs); and a breached embankment.

German Gully workings. The slopes of the spur, to the north of the track, have been surfaced to a depth of two metres. The surfacing runs right up to the reef workings.

Water race. A well defined water race cuts through the line of reef workings.

INTEGRITY/CONDITION: Range of features, most only in a fair condition. A track has been cut through the workings.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—range of quartz and alluvial mining features.

Archaeological potential—yes.

Network values—Bells Reef mine—Adams Reef workings.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 26.0 Deep Creek Mining Village

HI NO: 26.0 H7723-0682

LOCATION: Deep Creek, South of Butterfly Track, West of Daylesford
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

Deep Creek and its immediate vicinity experienced shallow alluvial mining, deep lead mining (mainly tunnelling under the basalt escarpment), and also quartz mining. Alluvial mining along the creek was being carried from the mid 1850s. The Deep Creek also supplied water for two races. Both were constructed in 1865 and went to Yandoit. The main period for sluicing in the Daylesford district was late 1850s to 1880s.

DESCRIPTION & INTERPRETATION OF FEATURES:

Hut sites. Remains of at least seven hut sites (mainly marked by collapsed stone fireplaces and hut outlines). One of the stone fireplaces has been converted into a small galvanised tin hut.
Sluice. On the west side of the creek, near where the water course cuts through a saddle, are the stone footings for a sluice, 20 ft x 6 ft. Thick blackberries obscure the sluice.

No historical information found on the mining village. May date to Daylesford's main sluicing period, which extended from the late 1850s to the 1880s.

INTEGRITY/CONDITION: Area used as unofficial shooting range; lots of broken beer bottles.

CULTURAL SIGNIFICANCE:

The site has:

- Scientific significance*—concentration of hut sites; and possible foundations of a sluice.
- Archaeological potential*—yes.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 27.0 Steel's Pioneer Company

HI NO: 27.0 H7723-0683

LOCATION: Immediately west of Yandoit Town Road, Yandoit
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Road Reserve or Unreserved Crown Land

SITE HISTORY:

Steele's Reef was opened in 1859 along with a number of other reefs in the Yandoit area. Small mining parties worked the reef until the late 1880s.

In 1887, the Steele's Reef Quartz Mining Company fixed steam pumping machinery and commenced sinking a shaft. The company was unable to find a profitable ore body and after two years work closed down. By this time the shaft had reached a depth of 150 feet. The mine was then taken over by the Pioneer Quartz Mining Company who appear not to have worked the mine.

In 1906, the Steele's Pioneer Company commenced work, erecting a winding winch at the old shaft sunk by the Steele's Company. The next year the company erected a 10-head battery, set of poppet legs, and a pumping engine. Sinking the shaft a further 100 feet, the company struggled to find payable ore and soon closed down.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Large, partly quarried dump (still being quarried).

Mining machinery. Two periods of winding engine foundations, all mounting bolts have been removed.

Near the Road is a large concrete winder bed, 26 ft x 14 ft, standing 4 ft. Abutting the rear of the concrete bed (eastern end) is a large brick engine bed, 18 ft x 4 ft, and standing 13 ft. The latter bed has stepped brickwork. To the south of the winder bed is a narrow brick mounting bed (16 ft x 3 ft) which has stone footings, and there is a large U-shaped brick bed, 26 ft x 11 ft.

CONDITION OF FEATURES: Foundations in good condition.

CULTURAL SIGNIFICANCE:

The site has:

Historical significance—Yandoit's main gold producer and largest mine.

Scientific significance—well preserved foundations, but little context.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 28.0 Trogisch's Reef

HI NO: 28.0 H7723-0684

LOCATION: East of Yandoit Track, south of Bridle Path Track
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

Trogish Reef, near German Gully, was opened in 1860. The reef receives little mention by the mining register, except for a reference in July 1861 to prospectors getting a kiln of quartz ready. The archaeological records suggests that the kilns on the site were associated with a battery. Old German reef, is the next reef south of Trogish's (other side of gully). The mining register in December 1860, records that a site for a machinery dam and tramway had been granted for this reef.

DESCRIPTION & INTERPRETATION OF FEATURES:

Quartz roasting kilns. On the north side of the gully is a set of small kilns that have been excavated into bedrock. Both kilns are 7 ft diameter, at least 6 ft deep, and have stone-retained fronts with intact portals. The bowls of the kilns have been burnt a characteristic red-orange colour. In the gully below the kilns is a stone fireplace and a stone blacksmith's forge.

Benched platforms. Slightly to the east, and above the kilns, are two platforms. The smaller of the two has a well preserved stone fireplace; the largest, which is a mullock paddock, has a shaft and a machinery site (decaying bedlogs).

Adit. At the base of the large platform is an open adit.

Slum pond. In the gully near the adit is a quarried small slum pond and adjoining treated (cyanided) tailings dump.

Reef workings. A short line of reef workings runs north along the spur from the shaft. Associated with the surface workings are at least two hut sites.

There is a strong possibility that the kilns are very early, probably constructed in the early 1860s.

CONDITION OF FEATURES: Range of features, good condition.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—rare type of site, survival of adjoining kilns associated with a range of features associated with an early quartz mine. There is a strong possibility that the kilns are very early, probably constructed in the early 1860s.

Archaeological potential—yes.

Network values—part of Yandoit Track network of sites--Scorpion Gully to Criterion Reef.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 29.0 Golconda Company

HI NO: 29.0 H7723-0685

LOCATION: Criterion Reef, east of Yandoit Track
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

The mining relics date to the 1880s and the operations of two companies. In the late 1870s, the German Gully Quartz Mining Company commenced operations on the site. By 1881, the company had sunk two shafts--No. 1 to 190 feet, and No. 2 to 334 feet--and were employing 14 men to work the claim. Crushings from the mine were averaging nearly 1-½ ounces to the ton. The company's operations came to a halt shortly after.

In 1888, the ground was taken up again, and a company floated in 24,000 shares called the Golconda Quartz Mining Company. The new company purchased a 16-inch cylinder winding engine from Ballarat and erected it on the site. The company had finished the erection of the mining plant by June 1888 and then commenced underground operations. For 18 months the company cross-cut in search of payable ore, until, at the 420-foot level, they finally struck payable stone. They immediately fixed another engine and a 10-head battery, and commenced mining. The Golconda Company was relatively unsuccessful.

References Department of Mines, Mining Surveyors *Quarterly Reports*, December 1880; March 1881; March 1882; March 1888; June 1888; June 1889; September 1889, and December 1889.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Intact large heap with two main phases of dumping. The earlier dump has three dumping lines; the longest is approximately 50 metres. The later heap is peaked and about 20 metres in diameter.

Mining machinery site. To the south of the mullock heap (opposite side of track) is an excavated platform which has a spread of brick, stone and mortar rubble. Above the machinery site is a stone blacksmith's forge and benched platform which has traces of footings for a rectangular structure (perhaps site for the battery's water tank).

Battery site. To the west of the heap is an excavated platform containing a spread of brick, stone and mortar rubble, and a largely buried stone boiler setting. Below the battery site is a small (30 ft wide) breached slum pond. A small dump of treated (cyanided) tailings lies below the slum pond.

Water dam. Large dry dam in the gully below the battery site.

INTEGRITY/CONDITION: Range of features, ranging from fair to good condition. A track now runs between the shaft and mining machinery foundations.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—range of features, including two machinery sites.

Archaeological potential—yes.

Network values—part of Yandoit Track network of sites--Scorpion Gully to Criterion Reef.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 30.0 Scorpion Gully Alluvial Workings

HI NO: 30.0 H7723-0686

LOCATION: Off Ruby's track. Main workings are at the head of Scorpion Gully
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

No historical information found on the site.

DESCRIPTION & INTERPRETATION OF FEATURES:

Puddler. At the head of Smiths Gully is a stone fire place, hut outline, small dry dam, well-defined puddler and associated bank of wash. The gully above the puddler has been extensively surfaced and sluiced and the alluvial workings peter out at a large (breached) sluicing dam.
Shallow sinkings. The gully below the puddler narrows for a few hundred metres and then broadens out into a wide flat (junction with Scorpion Gully) which contains extensive shallow alluvial workings. From this spot, to its head, Scorpion Gully is quite narrow, only broadening out near the access track where there is a breached sluicing dam. Stacks and walls of stone in the narrow sections of both Smiths and Scorpion gullies, above their junction, suggest that both have either been ground sluiced or converted into water race channels.

INTEGRITY/CONDITION: Good.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—well preserved alluvial mining landscape.

Archaeological potential—yes.

Network values—Part of Yandoit Track network of sites--Scorpion Gully to Criterion Reef.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 31.0 German Reef, Smiths Gully

HI NO: 31.0 H7723-0687

LOCATION: German Reef, north of Smiths Gully, east of Yandoit Track
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

German Reef experienced considerable activity during the early 1860s and appears to have been treated as two distinct reefs: namely, Old German and New German. Stamping machinery appears to have been installed on both reefs.

1860 Old German Reef. Site for machinery dam and tramway has been granted.¹

1861 New German Reef. Purchasers have brought boiler, stampers and other gear to the ground.²

New German Reef. Cuthbert and Co. are busy erecting their battery near the Yandoit Creek ... tramway of upwards of 1,000 ft.³

A local miner, Rod Kirby, who showed me the site, refers to the mine as the Yellow Glen.

References Department of Mines, Mining Surveyors *Monthly Reports*, March 1861, April 1861, July 1861.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mining village. Remains of five stone fireplaces and hut outlines. The fireplaces are in alignment (side by side) and four are still standing and the other one has collapsed. The stone fireplaces are approximately 6 ft x 3 ft and hut outlines 16 ft x 13 ft.

Hotel site. On opposite side of the gully to the hut sites is a large stone fireplace. Growing near the fireplace are some aloe cactus (plant associated with nineteenth century goldfield hotel sites).

Alluvial workings. There is a well preserved band of shallow sinkings (shaft depressions and small mounds) in the gully near the hut sites.

Shaft. On the spur above the hotel site is a quartz mine. The shaft main shaft has collapsed and is a danger to public safety. There has been some recent bulldozing in the vicinity of the shaft.

Machinery site. Near the shaft is a benched platform that has some decaying bedlogs and protruding iron bolts.

Mullock heap. Intact heap with five main dumping lines, longest dumping line would be 50 metres.

Water dam. Below the mullock heap is a breached dam which has a stone-lined inner face and by-pass.

INTEGRITY/CONDITION: Good, range of features. Limited bottle digging.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—Range of features, including domestic, alluvial and quartz mining.

Archaeological potential—Yes.

Network values—Part of Yandoit Track network of sites--Scorpion Gully to Criterion Reef.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

1 Mining Surveyors' Reports
 2 Mining Surveyors' Reports
 3 Mining Surveyors' Reports

PLACE NO. & NAME: 32.0 Welcome Gully Alluvial Workings

HI NO: 32.0 H7723-0688

LOCATION: Welcome Gully, east of Werona Road, north of Welcome Track
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

According to local miner Rod Kirby, Ernie and Bill Pfeiffer did the alluvial mining at this site in the 1950s or 60s. The "blocking-out" of the ground is identical to a technique which is described in a prospecting book published by Ion L. Idriess in 1931. Idriess's book, *Prospecting for Gold*, was re-published five times before 1950.

DESCRIPTION & INTERPRETATION OF FEATURES:

Adit. Collapsed adit and small mullock heap with the remains of a small stone-retained shelter.
Surfacing. The gully on the western side of the adit has been deeply surfaced or sluiced. Below the worked out ground is an area of ground (approximately 50 metres x 20 metres) which has been blocked out in panels ready for surfacing. A well-defined head race runs along the western side of the panel; a tail race along the eastern side.
Water race. A race runs around the head of the gully. An off-shoot runs to a small dam which supplied the water for working the gully below.

INTEGRITY/CONDITION: Good.

CULTURAL SIGNIFICANCE:

The site has:

- Scientific significance*—Surfacing in German Gully is an illustration of a widely used technology but is in a rare state of preservation.
- Network values*—Part of Yandoit Track network of sites--Scorpion Gully to Criterion Reef.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 33.0 Welcome, or White & Jackson's Mine

HI NO: 33.0 H7723-0689

LOCATION: Welcome Reef, east of Werona Road, north of Welcome Track
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

No historical information found on this mine. The local miner, Rod Kirby, who showed me the site referred to the mine as the Welcome or White & Jackson's mine.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Intact heap with six dumping lines. The shaft has been filled and there is some shallow open cutting to the south.

Tramway. 30 metre long tramway cutting runs east to a battery site.

Battery. Excavated platform (35 ft x 25 ft) with slot left by the decaying of timber mortar blocks. On the north side of the platform is a stone boiler setting. Only one of its walls still stands and is 30 ft long, 2 ft thick and stands some 7 ft. Near the rear of the boiler setting is a mound of red brick (remains of collapsed brick stack).

Slum pond. Below the battery site is a 60 ft diameter intact slum pond.

Water dam. In the gully to the north is a water dam.

Alluvial sinkings. Below the dam is a well defined band of shallow sinkings (shaft depressions and small mounds).

INTEGRITY/CONDITION: Good.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—Range of features. The boiler setting is relatively well preserved.

Archaeological potential—Yes.

Network values—Part of Yandoit Track network of sites--Scorpion Gully to Criterion Reef.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 34.0 Keep-It-Dark Reef Workings

HI NO: 34.0 H7723-0690

LOCATION: Mopoke Gully Track, off (north) of Werona Road, Mopoke Gully, West of Daylesford
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Boundary of Pine Plantation and Wombat State Forest

SITE HISTORY:

Auriferous reefs in Keep-it-Dark Gully were first opened in the late 1850s. James Walker was the successful prospector, and he obtained some incredible yields from the shallow depths, eg. 235 ounces from 16 tons, and on another occasion, 12 tons yielded 321 ounces. The reef was worked on various occasions throughout the late nineteenth century. The main period for machinery installation was from the late 1870s to late 1880s.

1872 Keep-it-Dark Reef. An engine of 12-hp and 10-head of stamps has been erected.

1878 Keep-It-Dark South Co. has started the engine.

1885 Iveson and party have taken up the old Keep-it-Dark Reef. They have sunk a new shaft 170 feet and expect to keep their battery of 8-heads going.

1887 South Keep-it-Dark Q.M. Co. at present erecting a portable engine on the main shaft.

References Department of Mines Mining Surveyors *Monthly Reports*, November 1860, December 1872, June 1878, September 1885, and September 1887.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heaps. Line of heaps (most with single dumping lines) running down spur to junction of Mopoke and Boots Gully. Eastern boundary of a pine plantation abuts the rear-end of most of the heaps. As a result, associated shafts and machinery sites have been destroyed.

Battery site. Below the northern-most heap is an excavated platform which contains a spread of brick rubble. Below the platform is a breached embankment.

INTEGRITY/CONDITION: Range of features, most are only in a fair condition. Pine plantation has removed most traces of associated machinery foundations.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—Range of features.

Archaeological potential—Yes.

Network values—Part of Keep-it-Dark/Boots network of sites.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 35.0 Mopoke Gully/Boots Gully Alluvial Workings

HI NO: 35.0 H7723-0691

LOCATION: Head of Boots Gully/Mopoke Gully Track, off (north) of Werona Road,
Head of Boots Gully, immediately east of Keep-It-Dark line of reef

MUNICIPALITY: Hepburn Shire

LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

Boots Gully, along with others in the area, was first worked in the mid 1850s. By 1860, the alluvial miners were intensively re-working the gullies: eg. in December 1860, the mining register reported that the upper parts of Keep-it-Dark and Boots Gully were being “systematically worked, drained, and faced out bodily”. Despite this attention, the gullies continued to attract mines: eg. in 1888, Sepold & party had a sluicing claim at Boot's Gully, near Keep-it-Dark Reef.

DESCRIPTION & INTERPRETATION OF FEATURES:

Creek bed/bank sluicing. Mopoke Gully has been worked to bed rock. A network of tail races run down the gully; also a scattering of pebble dumps and at least one stone fireplace.

CONDITION OF FEATURES: Good; no recent disturbance.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—Well preserved ground sluicing site.

Network values—Part of Keep-it-Dark/Boots network of sites.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 36.0 Charlesford Mine

HI NO: 36.0 H7723-0692

LOCATION: Boots Gully Track, off (west) Basalt Road, East side of Boots Gully
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Wombat State Forest

SITE HISTORY:

To be done--recent mine, post 1950s.

DESCRIPTION & INTERPRETATION OF FEATURES:

Battery. The battery shed has been removed leaving only post stumps and few sheets of galvanised iron. The upper floor of the battery has concrete foundations and wooden bedlogs for 10-head of stamps. The lower floor has a concrete slab with some decaying bedlogs.

Slum pond. Partly quarried large slum pond.

Water dam. In the gully below the slum pond is a dam with a high stone and concrete wall.

Pump shed. On the east side of the dam's embankment is a small galvanised iron pump shed.

Toilet. Remains of galvanised iron dunny.

Tramway. Collapsed, mainly burnt, 100 metre long.

Reef workings. Tramway terminates at the mine workings.

CONDITION OF FEATURES: Good. Slum pond has been partly quarried.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—Intactness and range of features.

Network values—Part of Keep-it-Dark/Boots network of sites.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 37.0 Bryce's Flat Mine

HI NO: 37.0 H7723-0693

LOCATION: South of Bald Hill Road, Bryces Flat, near Hepburn Springs
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

The Department of Mines Annual Report for 1903 records that Bruce's No. 1 North G. M. Company had done a considerable amount of prospecting for the year, sunk the shaft to a depth of 450 feet, and that the mine was well equipped with winding, pumping and crushing machinery. Presumably this is a misspelling of Bryce.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Intact heap with two 50 metre long dumping lines. The shaft has been filled.
Mullock heap. Intact heap with one main dumping line. The shaft has been filled.
Mining machinery. 5 ft square concrete winder bed with $\frac{3}{4}$ inch mounting bolts.
Battery. Located on east side of dump. Excavated platform with set of 3 timber mortar blocks (5-head of stamps); a second set has been burnt away. On a level above the stamper blocks are the engine foundations (arrangement of decaying bedlogs). To the west of the battery is the remains of a small stone boiler setting.
Slum pond. Below the battery is a small slum pond.

CONDITION OF FEATURES: Range of features, most are only in fair condition.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—Range of features documenting the operation of a small scale quartz mine.

Archaeological potential—Yes.

Network values—Bryce's Flat network: Bryces Flat mine—"Chinese" gardens—Blowhole diversion cutting—Glaston mine.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 38.0 "Chinese" Gardens

HI NO: 38.0 H7723-0694

LOCATION: Immediately west of Hepburn Recreation Reserve, east side of Jim Crow or Sailors Creek, Hepburn

MUNICIPALITY: Hepburn Shire

LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

Alluvial mining along creek commenced in 1853 when rich and extensive alluvial deposits were discovered underlying the thick basaltic or volcanic lava deposit through which the creek had cut its course. The miners tunnelled under the basalt cap and obtained gold from ancient river gravels. These gravels had been deposited in the Tertiary period, up to forty million years ago.

The auriferous wash retrieved was treated in puddlers or sluice boxes, and the tailings (river pebbles) were deposited in heaps at the base of the escarpment. The water for treating the wash was conveyed by water races.

DESCRIPTION & INTERPRETATION OF FEATURES:

Garden terracing. Several levels of terracing, which are overgrown with blackberries.

Sluiced workings. Overgrown pebble dumps and adits associated with working the ancient river gravels under the basalt cap.

CONDITION OF FEATURES: Good, but overgrown.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—Well preserved features associated with early alluvial mining.

Archaeological potential—Yes.

Network values—Bryce's Flat network: Bryces Flat mine—"Chinese" gardens—Blowhole diversion cutting—Glaston mine.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 39.0 "Blowhole" Diversion Tunnel

VHR NO: H1259

HI NO: 39.0 H7723-0695

LOCATION: End of Blow Hole Road, Sailors or Jim Crow Creek, Hepburn

MUNICIPALITY: Hepburn Shire

LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

Where an auriferous river or creek formed a peninsula, it was common for alluvial miners to cut a tunnel or an open channel through the isthmus, at a level to divert the water course and lay bare the gold-bearing gravels of the stream bed. Some thirteen such diversions have been recorded in Victoria, including the New Adventure tunnel, Omeo; Tunnel bend diversion, Gaffneys Creek; Thomson River tunnel, Platina; Jericho tunnel, Jordan River; Goulburn River tunnel, Flourbag Creek; Gibbo River tunnel, Benambra; Houghtons or McKoys Flat tunnel, Nicholson River; Big Peninsula tunnel, Upper Yarra; Blow Holes tunnel, Daylesford; Lerderderg tunnel, Blackwood; Evelyn tunnel, Pound Bend, Warrandyte; Delegate River tunnel, Bendoc; and Harrison's Cut, Dargo.

Historical information has been found about only six of these diversions. In all cases, European miners and rangers constructed the diversions dating from 1868 to 1889. No information was found on the Daylesford diversion cutting.

DESCRIPTION & INTERPRETATION OF FEATURES:

Diversion tunnel. A short tunnel cut through a narrow spur. The creek now runs through the cutting. The cutting effectively cut off about 0.75 km of the original creek. The dry creek bed has been extensively worked.

High terrace sluicing. High terrace gravels have been worked--well preserved pebble dumps and stone retained tailraces--in several locations in the vicinity of the diversion, that is, at 7723-3-4: 443.665 (end of the spur); 7723-3-4: 444.668 (next spur north from the diversion cutting); and 7723-3-4: 442.670 (next spur north).

INTEGRITY/CONDITION: Good.

CULTURAL SIGNIFICANCE:

The site has:

Historical significance—The Blowholes Gold Diversion Tunnel is a creek diversion which was probably built in the early 1860s when Jim Crow Creek was being extensively worked by European and Chinese miners. The short tunnel was used to divert the waters of Jim Crow Creek effectively cutting off a long section of the original creek. The dry creek bed has been extensively worked. The Blowholes Gold Diversion Tunnel is historically important as a characteristic and well preserved example of an early form of gold mining. Gold mining sites are of crucial importance for the pivotal role they have played since 1851 in the development of Victoria.

Scientific significance—Water diversion and sluicing are important key ingredients in an understanding of gold mining technology as it was employed in mountainous country where water was plentiful and perennial.

Network values—Bryce's Flat network: Bryces Flat mine—"Chinese" gardens—Blowhole diversion cutting—Glaston mine.

SIGNIFICANCE RANKING: Site Listed Victorian Heritage Register.
Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 40.0 Glaston Mine

HI NO: 40.0 H7723-0696

LOCATION: Bryce's Flat, east side of Sailors of Jim Crow Creek, Hepburn
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

No history found on the site. The reef running through the area is named Gladstone Reef on a Geological Survey map, surveyed by Norman Taylor, under the supervision of RAF Murray, September 1893.

DESCRIPTION & INTERPRETATION OF FEATURES:

The foundations are located on a high terrace of Jim Crow or Sailors Creek.
Mining machinery. Stone and clay mortar engine bed, 19 ft x 5 ft, and 4 ft high. The engine bed has some brickwork at both ends. Next to the engine bed is a largely buried boiler setting, 23 ft long, 8 ft wide, with 2 ft thick walls. The boiler setting is constructed of rough concrete. At the rear of the boiler setting is an 8 ft square stone chimney stack base.
Shaft. Shaft depression and small, partly buried mullock heap.
Alluvial workings. The terrace on which the foundations are located has been sluiced. The gully running along-side the track that leads to the mine has also been extensively sluiced.

INTEGRITY/CONDITION: Good, but foundations are partly buried.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—Well preserved mining machinery foundations.

Archaeological potential—Yes.

Network values—Bryce's Flat network: Bryces Flat mine—"Chinese" gardens—Blowhole diversion cutting—Glaston mine.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 41.0 Jim Crow Diversion Sluice

VHR NO: H1257

HI NO: 41.0 H7723-0697

LOCATION: Jim Crow Creek, between junction of Spring Creek and Dry Diggings Creek, western bank
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

Jim Crow Creek was being extensively worked by sluicing parties in the late 1850s/early 1860s. As the following references show, during this time both European and Chinese were living along the creek.

August 1859: Puddling and sluicing. A number of claims have lately been purchased by Chinamen, who seem on the whole to be getting on very well on Jim Crow. Parties of 10 or 12 bring their earnings from other diggings to purchase sluicing claims here ... A number of Chinamen are fossicking about our old alluvial workings; but I believe most of them are only watching an opportunity to begin sluicing or paddocking.

April 1861: Puddling has during the last month received quite an impetus. From Bendigo and Forest Creek, where generally puddlers are considered more expert than elsewhere, parties are weekly coming in, and most of them after a while take up claims and domesticate themselves in Jim Crow, a circumstance that augers well for the prosperity of the coming winter ... The creek beds are in full occupation by Chinese.

References Mining Surveyors *Monthly Reports*.

DESCRIPTION & INTERPRETATION OF FEATURES:

The Jim Crow Creek Gold Mining Diversion Sluice consists of a 400 metre long stone embankment which was probably built in the early 1860s when Jim Crow Creek was being extensively worked by European and Chinese miners. The embankment was used to divert the waters of Jim Crow Creek through sluice boxes, and away from its natural bed and eastern bank, which were then mined for alluvial gold. On the western slope of the creek are several house sites and at least one baker's oven.

Diversion sluice. Approximately 400 ft long, 4 ft to 8 ft high stone wall running along the western side of the creek. The creek bank and terrace behind the stone wall has been extensively worked, but now is very overgrown with blackberries.

Water races. Several levels of benched water races run along the eastern side of Jim Crow Creek.

CONDITION OF FEATURES: Good, but very overgrown.

CULTURAL SIGNIFICANCE:

The site has:

Historical significance—The Jim Crow Creek Gold Mining Diversion Sluice is historically and scientifically important as a characteristic and well preserved example of an early form of gold mining. Gold mining sites are of crucial importance for the pivotal role they have played since 1851 in the development of Victoria.

Scientific significance—Well preserved diversion sluice with associated alluvial workings. Water diversion and sluicing are important key ingredients in an understanding of gold mining technology as it was employed in mountainous country where water was plentiful and perennial.

Archaeological potential—Yes, the clearance of the blackberries would expose more of the features. The Jim Crow Creek Gold Mining Diversion Sluice is archaeologically important for its potential to yield artefacts and evidence which will be able to provide significant information about the cultural history of gold mining and the gold seekers themselves.

Network values—Diversion sluice/workings and nearby mining village.

SIGNIFICANCE RANKING: Site Listed Victorian Heritage Register.
Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 42.0 Jim Crow Hut Sites

HI NO: 42.0 H7723-0698

LOCATION: Jim Crow Creek, between junction of Spring Creek and Dry Diggings Creek, western bank
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Hepburn Regional Park

SITE HISTORY:

Jim Crow Creek was being extensively worked by sluicing parties in the late 1850s/early 1860s. As the following references show, during this time both European and Chinese were living along the creek.

August 1859: Puddling and sluicing. A number of claims have lately been purchased by Chinamen, who seem on the whole to be getting on very well on Jim Crow. Parties of 10 or 12 bring their earnings from other diggings to purchase sluicing claims here ... A number of Chinamen are fossicking about our old alluvial workings; but I believe most of them are only watching an opportunity to begin sluicing or paddocking.

April 1861: Puddling has during the last month received quite an impetus. From Bendigo and Forest Creek, where generally puddlers are considered more expert than elsewhere, parties are weekly coming in, and most of them after a while take up claims and domesticate themselves in Jim Crow, a circumstance that augers well for the prosperity of the coming winter ... The creek beds are in full occupation by Chinese.

References Mining Surveyors *Monthly Reports*.

DESCRIPTION & INTERPRETATION OF FEATURES:

Ovens. Two small dome-shaped baking ovens. The ovens are constructed of stone and are largely buried. The best preserved oven is 7 ft wide, 6 ft deep, and 2-½ft high. The oven has a 1 ft square entrance. The second oven has been partly demolished.
 Hut sites. According to Mr Rod Kirby, the local miner who showed me the site, there is a concentration of hut sites (benched platforms and/or stone fireplaces) in the vicinity of the ovens.

CONDITION OF FEATURES: Good, but one of the ovens has been partly demolished. Recent scavenging for building stone.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—Well preserved baking oven associated with a concentration of hut sites.

Archaeological potential—Yes.

Network values—Jim Crow diversion sluice/workings and nearby mining village.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 43.0 William Tell Company

HI NO: 43.0 H7723-0664

LOCATION: Immediately north of Old Ballarat Road, east side of Sailors Creek.
Daylesford

MUNICIPALITY: Hepburn Shire

LAND USE/STATUS: Unreserved Crown Land.

SITE HISTORY:

The William Tell Company worked from 1910 to 1915. During this time it crushed 6,700 tons of stone for 3,050 ounces. The company paid £3,000 in dividends. The company erected a steam-powered winding and crushing plant in 1911. The company crushed with payable results through 1912 and 1913, but by 1914 was obtaining disappointing results.

References Maddicks, Henry T., *100 Years of Daylesford Gold Mining History*, p.51.
Department of Mines, *Annual Reports*, 1911, 1912, 1914, and 1915.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Remnant of mullock heap, ends of two dumping lines. Track now goes over the heap.

Slum pond. In the gully below the mullock heap is a largely quarried slum pond.

Battery. The foundations of the battery are located above the slum pond, west side of the gully. Two levels of concrete floor. The upper floor, measuring 30 ft x 20 ft, has two sets of decaying timber mortar blocks; and a large brick engine bed, 17 ft x 4 ft, standing 8 ft. Near the engine bed is a boiler setting depression. The southern end of the lower concrete floor has gone, bulldozed during the construction of a track.

INTEGRITY/CONDITION: Battery foundations in fair condition. Some bricks have been removed from the battery engine bed. Gorse, broom and blackberries obscure the battery foundations. Southern end of battery has been bulldozed; and slum pond has been quarried.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—Intactness of the battery foundations.

Archaeological significance—Yes.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 44.0 New Nuggetty Gully Alluvial Gold Workings

VHR NO: 44.0 H1306

HI NO: 44.0 H7723-0472

LOCATION: Yandoit Creek-Werona Road, Yandoit
MUNICIPALITY: Mount Alexander Shire
LAND USE/STATUS: Freehold, Crown Allotments 35N, 35Q, and 35L, Section 2, Parish of Campbelltown

SITE HISTORY:

The New Nuggetty Gully Alluvial Gold Workings is an excellent characteristic example of shallow mining for alluvial gold. Swiss Italians settled the area prior to mining and the house-remains show distinctive architectural details pertaining to the Ticino region of Switzerland. The gully was opened in 1859 with gold seekers recovering some large nuggets. In 1860, the New Nuggetty Company constructed a creek diversion to work a large section of the gully. The water race was constructed during the mid 1865, and after about 1867, the gully was worked by fossickers.

DESCRIPTION & INTERPRETATION OF FEATURES:

The site has remnants of three different forms of mining--shaft sinkings, creek diversion and sluicing, and ground sluicing--associated with at least five house sites.

CONDITION OF FEATURES: Good, the site has been protected by landowner.

CULTURAL SIGNIFICANCE:

The site has:

Historical significance—The area was settled prior to mining by Swiss Italians and some of the hut remains show distinctive details pertaining to the Ticino region of Switzerland.

Scientific significance—The place has a unique collection of features, including the remnants of three different forms of mining--shaft sinking, creek diversion and ground sluicing--associated with at least five hut sites.

Archaeological potential—Place has good integrity and a range of relics likely to yield archaeological information.

SIGNIFICANCE RANKING: Site Listed Victorian Heritage Register.
Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 45.0 Minotti's Flour Mill and Gold Mine

HI NO: 45.0 H7723-0699

LOCATION: Hepburn-Newstead Road, Franklinford
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: Freehold

SITE HISTORY:

James Roberston came from Scotland and selected 40 acres of land at Shepherds Flat, near Daylesford. The property was exceptional because there were natural springs of clear water which welled up and flowed down the slope into Jim Crowe Creek, a quarter of a mile away.

Because of the Springs, the property was known as "Mill Springs Farm". An early pioneering flour miller harnessed the springs by conveying the water along a contoured race around the hillside. The miller had his flour mill at the bottom of the hill, near Jim Crowe Creek. It was powered by a 16 feet water wheel, driven by water from the springs. Battista Minotti was a miller here in 1875.

The millstone was cut and grooved from great slabs of solid quartz rock. They were still visible 20 years ago, when this newspaper report ... [*Ballarat Courier*, 16 October 1968, p.21] ... was published. For many years the mill ground grain for the local farmers, but it was finally burnt down.¹

Title details shows the land containing the flour mill and water races also included part of a mining claim registered for the New Year G. M. Co (No. 1487).² The title information shows that Battista Minotti and Guiseppo Pozzi were in partnership.

References Jones L & P. (1990) *Flour Mills of Victoria, 1840 to 1990. An Historical Record*. Section 31, "Land Act 1869", No. 3186 date 13 July 1870; and No. 3183, 13 July 1870.

DESCRIPTION & INTERPRETATION OF FEATURES:

Key components of the site are:

- A stone-lined water wheel pit with remnants of water wheel associated with two small ovens.
- One stone lined water race.
- House foundations.
- Stone fencing included large enclosure with building foundations.
- Stone retained platforms; orchard; and road.
- Shaft, whim platform and remnants of stone buildings.

CONDITION OF FEATURES: Very intact and unusual collection of archaeological relics associated with flour milling and gold mining.

CULTURAL SIGNIFICANCE:

The site has:

Historical significance—Associated with settlement of the area by Swiss-Italian immigrants.

Scientific significance—Very intact and unusual collection of archaeological relics associated with flour milling and gold mining.

Archaeological potential—The place has not been excavated by treasure hunters. Blackberry bushes protect many of the relics, including stone buildings. The place has very high archaeological potential.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

¹ Jones L & P. (1990) *Flour Mills of Victoria, 1840 to 1990. An historical record*.

² Section 31, 'Land Act 1869'. No. 3186 date 13 July 1870; and No. 3183, 13 July 1870

PLACE NO & NAME: 46.0 Stockyard Creek Alluvial Workings

HI NO: 46.0 H7623-0242

LOCATION: North side of Tom Jones Track, southern branch of Stockyard Creek
MUNICIPALITY: Hepburn Shire
LAND USE/STATUS: State Forest

SITE HISTORY:
No specific history on Stockyard Creek found.

DESCRIPTION & INTERPRETATION OF FEATURES:
Stockyard Creek, southern branch: Shallow alluvial. Well defined band of shallow sinkings. Very scrubby, low visibility but possibility of puddlers, house sites, etc.

INTEGRITY/CONDITION: Not surveyed, too scrubby. Nature of the scrub suggests that the workings would be relatively undisturbed.

CULTURAL SIGNIFICANCE:
The site has:
Scientific significance—Rare type of site, undisturbed shallow alluvial workings.
Archaeological potential—Yes, may be hut or camp sites associated with the shallow workings.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

PLACE NO. & NAME: 47.0 Harry Lauder Company

HI NO: 47.0 H7623-0243

LOCATION: 1.2 kms along Harry Lauder Mine Track from junction with Heagneys Track.
North side of track--south side of the track is freehold land

MUNICIPALITY: Hepburn Shire

LAND USE/STATUS: State Forest

SITE HISTORY:

The Harry Lauder Company was the most successful of the Campbelltown quartz mining companies. In 1910 it installed a steam-powered mining plant. Its 10-head stamping battery crushed 1,614 tons between 1910 and 1912 for a yield of 398 ounces of gold.¹

References Harris, W.J., March 1948, pp.46-54.

DESCRIPTION & INTERPRETATION OF FEATURES:

Mullock heap. Largely quarried heap.

Battery. Located on the eastern side of the mullock heap. Two levels of concrete floors: upper level, 24 ft x 17 ft; and lower floor, 26 ft x 17 ft. The upper floor has two stamper slots (10-head of stamps) which have traces of timber mortar blocks. At the rear of the upper floor is a well preserved loading ramp, 30 ft x 14 ft, standing 6 ft.

Engine bed. On the western side of the upper battery floor is largely buried brick mounting bed (approximately 9 ft long, with 1 inch mounting bolts).

Pond. Below the battery is a 50 metre x 20 metres, 1 metre high, slum pond. There is also a small dry water dam near the battery.

Winder bed. Between the battery and the mullock heap is a 7 ft square, 3 ft high, brick winder bed. The brickwork rests on stone footings and the bed has ¾ inch bolts.

Boiler setting. At the rear of the brick winder bed is a boiler setting depression and what appears to be the remains of a stone chimney stack base.

INTEGRITY/CONDITION: Good. No recent disturbance, apart from some quarrying of the mullock heap.

CULTURAL SIGNIFICANCE:

The site has:

Scientific significance—Because of the range of surviving features.

Archaeological potential—Yes.

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear

Date: 1998.

¹ Harris, W.J., March 1948, pp46-54

PLACE NO. & NAME: 48.0 Thomas Smiths “Good Bed” Fossil Quarry

HI NO: 48.0 H7723-0479

LOCATION: —
Boundary Road, Yandoit
MUNICIPALITY: Mount Alexander Shire
LAND USE/STATUS: Freehold

SITE HISTORY:

Thomas Smith, a local Sandon farmer, gained distinction as a geologist through the discovery and collection of graptolite fossils from the Sandon-Campbelltown district. Thomas Smith carried out his geological work from c.1898 to his death in 1944, gaining both Australian and international recognition because of the importance of his graptolite fossil discoveries. Thomas Smith’s graptolite fossil collection is housed in the Geology Department, Museum of Victoria. The centrepiece of the collection is the extraordinarily well preserved fossils, including specimens of 16 previously unknown species, excavated from a small quarry in LP143735—known as the “good bed”.

DESCRIPTION & INTERPRETATION OF FEATURES:

Shallow L-shaped quarry and associated rubble.

INTEGRITY/CONDITION: Good. No recent disturbance.

CULTURAL SIGNIFICANCE:

The site has:

Historical significance—Thomas Smith’s “good bed” fossil quarry is historically important because of its association with Thomas Smith and his significant contribution to the knowledge of the State’s unique geology.

Scientific significance—Thomas Smith’s “good bed” fossil quarry is scientifically important in the context of the site’s contribution to the advancement of geological understanding in the State, and due to the rarity in Victoria of shelly fossils, such as graptolite, which are used worldwide for the dating and correlation of rocks laid down during the Ordovician, Silurian and Early Devonian Periods (390-500 million years ago).

SIGNIFICANCE RANKING: Site Listed Heritage Inventory.

Assessed by: David Bannear **Date:** 1998.

