Name Pierce's eucalyptus distillery Reference in 1998 S06

Marong Study

Address 257 Pierce's Road, Sebastian Map reference VicRoads 44 E3

Building type Industrial site Survey date July and August 2010

Established 1911 (ceased operations early **Recommendation** Include in the Schedule 2000s) to the Heritage Overlay

Significance The Pierce eucalyptus distillery is of local historical and technological significance.





Left: Label for J W Pierce & Sons 'Wallaby Brand' (Source: Ken Arnold, *Bendigo its Environs, The Way it Was*, Volume 1, 2003, p. 95). Right: The Pierce eucalyptus distillery, viewed from Pierces Road.





Left: Section of the timber retaining wall. Right: Brick vats adjacent to the stack.





Left: Aerial view of 257Pierces Road, 2010 (Source: City of Greater Bendigo). Right: Proposed Heritage Overlay map, with the subject property shown as S06.¹

Intactness Good Fair ✓ Poor

History

Eucalyptus oil was one of the first primary products exported from Australia; Governor Philip sent a sample to Sir Joseph Banks in 1790. In 1852, Government botanist Ferdinand Von Mueller recommended that the distillation of eucalyptus oil may have commercial potential. Two years later Joseph Bosisto (1824-1896), a chemist, parliamentarian and friend of Von Mueller, established the first eucalyptus distillery ('still') in Victoria. Bosisto used the oil in a variety of medicinal concoctions, including cold remedies and inhalants. The product was also regarded as a source of fuel: in 1858, the town of Kyneton was illuminated by gas from eucalyptus oil. Eucalyptus oil has also been used as an ingredient in perfumes, disinfectants germicides and industrial lubricants. By the mid-1880s, the eucalyptus distilling industry was established throughout Victoria.

The first eucalyptus oil producer in Bendigo was German chemist Richard Sandner. In 1876, working in partnership with his two sons, Sandner operated a plant and refinery in Bridge Street, Bendigo. The business thrived, and Sandner later opened a branch in Chicago, run by his son Carl. Other early producers included Albert Hartland and Matthew Hodgson at Huntly North in 1890, and Jack Shadbolt, who operated a distillery at the base of the Flagstaff Hill, north of the Camp Hotel (W6) in the Whipstick from the 1890s. The boom years of the local industry began in about 1900, and lasted until the 1940s. By the outbreak of World War I, the Whipstick and surrounding area was the premier eucalyptus oil-producing region in Victoria. During the Depression of the 1930s, there were an estimated 50 distilleries in operation, with the epicentre of the industry being the Whipstick. The rise of eucalyptus distilling coincided with the decline of mining. During the early years of the twentieth century, large tracts of auriferous-class land in the area north of Bendigo were opened for selection, and workers looked to 'eucy' as a source of employment were while their blocks were cleared and prepared for agriculture in compliance with the Lands Act.

Eucalyptus distilleries are typically improvised utilitarian constructions built of readily available materials and making use of recycled machinery and equipment. No two are exactly alike. However, there are some fundamental commonalities, including vats, a crane to lift the vat lids, a boiler, chimney stack, metal pipe work and a condensing dam. In traditional (pre-mechanisation) eucalyptus oil distillation, leaves are stacked in in-ground brick-lined vats, typically around 3.6m (12ft) deep and 2.1m (7ft) in diameter, ¹¹ and steam from the boiler is released into the bottom of the vat. The oilheavy steam is channelled through a metal pipe at the top of the vats that runs through the adjacent condensing dam, where the steam evaporates leaving the oil to be collected in a receiving pot at the side of the dam. The extraction process takes approximately four hours for green growth, and two hours for dry leaves. ¹²

Eucalyptus distilling is physically demanding and lonely work, and almost exclusively male. Cutters harvest leaves, and transport them to the distillery, where they are processed by the distillers. ¹³ Historically, rates of pay for cutters depended on the amount of oil yielded by each vat. The industry was never unionised and even during the good times, profits were marginal. ¹⁴ In the Whipstick, as in other areas, the industry typically attracted itinerant or short-term workers. ¹⁵

The industry was partially mechanised in the post-World War II period, notably with the introduction of portable vats mounted on the back of trucks, which were larger than brick vats, and could be stacked at the point of collection. Today, the Australian eucalyptus industry barely survives. The last operational distillery in the Whipstick was Hooper's, near Neilborough (PF1), which closed in 2009. The Hartland plant at Huntly survives primarily as a tourist destination. Today Spain, Portugal and Israel are among the leading international producers of eucalyptus oil.

John Wiseman Pierce of Flora Hill, south of Bendigo, ran a butchers shop near the Bulls Head Hotel before moving to Sebastian in 1911. He established this distillery in that year, building his house and outbuildings a little further west on the other side of what became known as Pierce's Road. It was at this distillery that Pierce produced his 'Wallaby Brand' (see page 1) eucalyptus oil. He died in 1942 and his two sons, James and Thomas, took over. Thomas closed the plant in the early 2000s. The site was subsequently acquired by local couple the Lands, who have removed machinery and established the site as a conservation area. The site was subsequently acquired by local couple the Lands, who have removed machinery and established the site as a conservation area.

Victoria's Framework of Historical Themes

Victoria's themes and sub-themes:

- 4.6: Exploiting other mineral, forest and water resources
- 5.1: Processing raw materials
- 5.2: Developing a manufacturing capacity
- 5.3: Marketing and retailing
- 5.8: Working

Description & Integrity

Pierce's eucalyptus distillery is located to the north of Pierce's Road, approximately 2km from the Bendigo-Pyramid Road to the west. Operations at the distillery ceased in the early 2000s. At that time, the site included the following machinery and equipment:

- A Cornish boiler in brick housing, including pressure gauges the boiler had been relocated from the Nell Gywnne mine;
- Brick stack:
- Two brick lined vats with concrete covers:
- A derrick crane with winch and engine;
- Pipework to condensing dam and glazed terra cotta collection point for eucalyptus oil to the west of the dam:
- Four pumps for raising water from the dam to boiler. The manufacturers' details were: Miller and Co. Machinery Pty. Ltd, South Melbourne and Bendigo; Blakes Patent No.4, Boston and New York; Geo. F. Blake Manufacturing Co, New York and Boston; and the Austral Otis Engineering Coy. Ltd., Melbourne;
- An ash dump; and
- Hut of corrugated galvanised sheeting.¹⁸

The present owners, the Lands, have removed much of the above. Today, all that survives is the stack, the dam, the circular brick-lined vats, brick water race, some pipework, the ash dump and the corrugated iron hut.

The brick stack, square in plan and tapering in four stages, is unusually tall, and includes a fire hole to the north. The stack is adjacent to the two brick vats (the tops of which are visible on the ground), one of which is filled with debris; the other retains it concrete lid, inscribed with the date 15 September 1971. A timber retaining wall is located beneath the vats and stack, and forms the north bank of the condensing dam. A brick water race and some pipework also survive. North of the dam and stacks and the ash dump, whose extent is demonstrated by the absence of any natural growth, a result of the acidity of the burned eucalyptus leaves. The corrugated iron hut is extant and was not inspected internally.

Comparative Analysis

In the Whipstick, the eucalyptus distilling industry flourished from the 1890s, following the decline of gold mining, to World War II. During the Depression of the 1930s, there were approximately 50 eucalyptus distilleries in the area. By 1986, only four operational distilleries survived. Of these, all are closed, although the Hartland distillery at Huntly operates as a tourist attraction. The trajectory of the Pierce distillery was typical, in having been founded in 1911, and operated by two generations of the family for a period of over 80 years.

Eucalyptus distilleries are characterised by the inventive application of available materials and equipment, typically in isolated bush settings. They necessarily include a boiler (for sites in the Whipstick, these are often gold mining-era equipment), stack, vats, means of lifting vats lids and a dam, and often include some form of accommodation and evidence of a post-World War II mechanised production processes. Despite the removal of machinery and equipment, the former Pierce eucalyptus distillery retains the capacity to demonstrate its original function, including through the retention of the tall chimney, brick-lined vats, brick water race and the dam. Of comparable sites in the local area, the Flett eucalyptus distillery at Leatherarse Gully, Woodvale (W7) has a higher degree of intactness than the Pierce distillery; it includes its boiler, crane derrick, pipework, sleeping quarters

and some associated equipment, such as a eucalyptus dray. The former Hooper distillery near Neilborough (PF1) also retains its iron stack and evidence of two distillation processes, traditional and mechanised. However, as with the Pierce site, the boiler has been removed. The former Scott's distillery, on Scott's Road near Neilborough also generally compares with the Pierce site, and retains its stack and dam.

Assessment Against Criteria

Amended Heritage Victoria Criteria

Criterion A: Importance to the course, or pattern, of the City of Greater Bendigo's cultural history.

Pierce's eucalyptus distillery on Pierce's Road, Sebastian, is of historical significance for its capacity to recall aspects of an industry that played a significant role in the economy of the Whipstick, and broader areas of regional Victoria, from the 1890s to the late twentieth century. John Wiseman Pierce established the distillery in 1911, and passed it to his two sons who operated the plant until the late-1990s. The harvesting and distilling of eucalyptus was an important source of employment for workers in the goldfields following the decline of mining and became particularly important during the Depression of the 1930s, when there were an estimated 50 distilleries in the Whipstick. The latter was the epicentre of eucalyptus distilling in Victoria, where the industry has only recently died out. As with the earlier years of gold mining, small-scale operators with limited capital were able to exploit a naturally occurring resource in the area.

Criterion B: Possession of uncommon, rare or endangered aspects of the City of Greater Bendigo's cultural history.

Pierce's eucalyptus distillery is a rare surviving example of an industrial operation which was once relatively common in the Whipstick, and in regional areas across Victoria. In the 1930s, there were an estimated 50 'stills' in Whipstick area. By 1986, four operational distilleries survived. Although machinery has been removed from the site, it retains the ability to demonstrate aspects of the production process.

Criterion C: Potential to yield information that will contribute to an understanding of the City of Greater Bendigo's cultural history.

N/A

Criterion D: Importance in demonstrating the principal characteristics of a class of cultural places or objects.

Pierce's eucalyptus distillery is significant for its ability to demonstrate the industrial operation of the site through its retention of some essential components of the distilling process, including its chimney stack, condensing dam and circular in-ground brick vats.

Criterion E: Importance in exhibiting particular aesthetic characteristics in the context of the municipality.

N/A

Criterion F: Importance in demonstrating a high degree of creative or technical achievement at a particular period.

The Pierce eucalyptus distillery, although depleted by the removal of machinery and equipment, is of technological significance for its capacity to demonstrate aspects of a distilling operation that ran from 1911 to the 1990s. Elements which remain on site include the tall brick chimney, brick-lined vats, brick water race and the dam, some pipework, the ash dump and the corrugated iron hut. The site, with its remnant elements, remains within the environs of the Whipstick which in turn evokes the original natural and isolated setting of the distilling operation.

Criterion G: Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons. This includes the significance of the place to Indigenous peoples as part of their continuing and developing cultural traditions.

N/A

Criterion H: Special association with life or works of a person, or group of persons, of importance in the City of Greater Bendigo's history.

N/A

Statement of Significance

What is significant?

Pierce's eucalyptus distillery ceased operations in the early-2000s. Extant elements include the square brick stack, dam, circular brick-lined vats, brick water race, some pipework and the ash dump. The site is located to the north of Pierce's Road, approximately 2km from the Bendigo-Pyramid Road to the west.

How is it significant?

The Pierce eucalyptus distillery is of local historical and technological significance.

Why is it significant?

The Pierce eucalyptus distillery, on Pierce's Road east of Sebastian, is of local historical and technological significance. It is historically significant (Criterion A) for its capacity to recall aspects of an industry that played a significant role in the economy of the Whipstick and broader areas of regional Victoria, from the 1890s to the late twentieth century. John Wiseman Pierce established the distillery in 1911, and passed it to his two sons who operated the plant until the late-1990s. The harvesting and distilling of eucalyptus was an important source of employment for workers in the goldfields following the decline of mining and became particularly important during the Depression of the 1930s, when there were an estimated 50 distilleries in the Whipstick. Today, only five survive, with varying levels of intactness (Criterion B). The Whipstick was the epicentre of eucalyptus distilling in Victoria, where the industry has only recently died out. As with the earlier years of gold mining, small-scale operators with limited capital were able to exploit a naturally occurring resource in the area. Technologically (Criterion F), the Pierce eucalyptus distillery, although depleted by the removal of machinery and equipment, is significant for its capacity to demonstrate aspects of a distilling operation that ran from 1911 to the 1990s. Elements which remain on site include the brick chimney stack, dam, circular brick-lined vats, some pipework, the ash dump and the corrugated iron hut (Criterion D). The site, with its remnant elements, remains within the environs of the Whipstick which in turn evokes the original natural and isolated setting of the distilling operation.

Recommendations

The property is recommended for inclusion in the Schedule to the Greater Bendigo Heritage Overlay. The above map illustrates the Overlay area, although the focus of significance is on the tall brick chimney, brick-lined vats, brick water race and the dam, the pipework, ash dump and the corrugated iron hut. The setting of the site, including the enclosing Whipstick forest, is also significant. A reduced extent of Heritage Overlay could be considered, which captures the significant elements only, and their immediate curtilage.

External Paint Colours	No
Internal Alterations Controls	No
Tree Controls	No
Outbuildings and fences exemptions	No

Victorian Heritage Register	No
Prohibited uses may be permitted	No
Incorporated plan	No
Aboriginal heritage place	No

Identified By

Andrew Ward, 1998.

References

Ken Arnold, Bendigo its Environs, The Way it Was, Volume 1, Crown Castleton Publishers, 2003.

Andrew Ward et al, City of Greater Bendigo Heritage Study (Marong) Study Area, Stage 2, 1998.

Specific:

- Changed map from Heritage Policy Citations Review, 2011. November 2011.
- Ray Wallace, As Aussie As a Gum Leaf, A Brief History of the Eucalyptus Industry in Bendigo, Australian Farm Management Society, Bendigo Branch, p. 1.
- Deirdre Morris, 'Mueller, Sir Ferdinand Jakob Heinrich von [Baron von Mueller] (1825 1896)', Australian Dictionary of Biography, Volume 5, Melbourne University Press, 1974, pp 306-308.
- Ray Wallace, *As Aussie As a Gum Leaf, A Brief History of the Eucalyptus Industry in Bendigo,*Australian Farm Management Society, Bendigo Branch, p. 1
- See, <u>www.land.vic.gov.au/DSE/nrenfor.nsf/childdocs/489D890EF4F9EFA14A256AA40011BFEF-C744C5604A8870504A256AA40011D6A4-21B9A0AF6E36F3ACCA2574580017AEC4?open</u>
- Ray Wallace, *As Aussie As a Gum Leaf, A Brief History of the Eucalyptus Industry in Bendigo,* Australian Farm Management Society, Bendigo Branch, p. 1
- Jan Neil, *The Golden Age Retraced*, Mullaya, Victoria, 1973, p. 58.
- Ray Wallace, Sydney Flat to Woodvale Green, Woodvale Progress Association, 1984, p. 48.
- Ray Wallace, *As Aussie As a Gum Leaf, A Brief History of the Eucalyptus Industry in Bendigo,* Australian Farm Management Society, Bendigo Branch, p. 2.
- Ray Wallace, *As Aussie As a Gum Leaf, A Brief History of the Eucalyptus Industry in Bendigo,* Australian Farm Management Society, Bendigo Branch, p. 1.
- Jan Neil, *The Golden Age Retraced*, Mullaya, Victoria, 1973, p. 58.
- Ray Wallace, *As Aussie As a Gum Leaf, A Brief History of the Eucalyptus Industry in Bendigo,* Australian Farm Management Society, Bendigo Branch, p. 2; and Jan Neil, *The Golden Age Retraced*, Mullaya, Victoria, 1973, pp. 58-59.
- Eucalyptus typically takes 20 years to mature, and can be harvested once a year. While maturing, eucalyptus can be harvested every 18-2 months. Ray Wallace, *As Aussie As a Gum Leaf, A Brief History of the Eucalyptus Industry in Bendigo*, Australian Farm Management Society, Bendigo Branch, p. 2.
- Ray Wallace notes that in the early 1920s the price for eucalyptus oil fluctuated from 1 shilling and twopence to 1 shilling and threepence per pound, and during the Depression down to 9 pence per pound. By the Second World War, the price had risen to 8 shillings per pound. See, Flett's Eucalyptus Distillery' citation, Andrew Ward *et al*, City of Greater Bendigo Heritage Study (Marong) Study Area, Stage 2, 1998.
- Ray Wallace, *As Aussie As a Gum Leaf, A Brief History of the Eucalyptus Industry in Bendigo,* Australian Farm Management Society, Bendigo Branch, p. 2; also pers comm., Ray Wallace and Adam Mornement, Lovell Chen, 9 August 2010.
- Pers comm., Thomas Pierce, and Ray Wallace, local historian, 11 August 1998.
- ¹⁷ 'Pierce's Eucalyptus Distillery' citation, Andrew Ward *et al*, City of Greater Bendigo Heritage Study (Marong) Study Area, Stage 2, 1998.
- ¹⁸ 'Pierce's Eucalyptus Distillery' citation, Andrew Ward *et al*, City of Greater Bendigo Heritage Study (Marong) Study Area, Stage 2, 1998.