City of Greater Bendigo: Marong Heritage Study Mining Sites

OLD TOM REEF CYANIDE WORKS

Other Names

Location Parcel No. P127170, State Park, west side of Old Tom Road, Old Tom Reef, Whipstick

Map Reference Marong 1:25,000 - BV550.413

Victorian Heritage Register	No
National Estate Register	No
Planning Scheme	No

Description North of Old Tom Mine, across a concrete-lined water race, is a dump of treated battery sand, which has apparently been shifted from near the battery. On top of the sand dump is a line of depressions signifying three 22 foot diameter cyanide vats. The corrugated iron of which the vats were originally constructed has apparently rusted away. North of the vats is the circular depression for a drainage vat.

History Period of activity: post 1930

Thematic Context Mining

Comparative Examples There are five other cyanide works sites within the study area. These are: Moon, Devonshire Sand, Frederick the Great, Shamrock and Wilson's Hill. All are from the 1930's period of mining on Bendigo and therefore relate to the second phase of cyaniding in Victoria. There are no sites on Bendigo which belong to the first phase of cyaniding prior to 1914.

Statement of Significance The site is associated with the small-scale re-treatment of tailings by the cyanide process and represents the last phase of mining on Old Tom Reef which first began in 1860 (criterion A). The Old Tom Reef site is the most intact of the smaller cyaniding sites in the study area (criterion B) and is associated with other significant sites in the neighbourhood (that is, Old Tom Reef mine and alluvial workings and the Raywood Channel).

Level of Significance Regional

Recommendation The site should be protected by inclusion in the Schedule to the Heritage Overlay Table in the City of Greater Bendigo Planning Scheme, by registration with the Victorian Heritage Council, and in accordance with the general principles of the conservation policy for mining sites.

Heritage Boundaries The approximately triangular site is bounded on the south-west by the Eaglehawk-Neilborough Road, on the north by Scotsmans Track and on the east by Old Tom Road between the Eaglehawk-Neilborough Road and the Raywood Channel and by the Raywood Channel between Old Tom Road and Scotsman Track.

References

1. F. Cusack, "Bendigo: a history." Melbourne, Heinemann, 1973.
2. Department of Mines, Victoria. Annual Report including gold and mineral statistics for the year.

3. Annual Report of the Secretary for Mines, Victoria.
4. Annual Report of the Secretary for Mines and Water Supply, Victoria.
5. Victoria, Department of Mines, Gold and mineral statistics for the year.
6. Victoria, Department of Mines. Annual Report including gold and mineral statistics and boring records for the year.
7. Department of Mines, Annual report including statistics relating to the mining industry.
8. “The cyanide process.” The Bendigo Advertiser, Friday, 9 July 1897, p2, col.7.

Notes

Assessed by David Bannear in February 1992 and reviewed by Peter Milner in June 1998.

Chronology 1930s Gold production in the thirties was appreciably supplemented by local alluvial mining and cyaniding. A great many hydraulic sluices were working in the Bendigo district by the mid-thirties and some 1,500 men found employment in alluvial mining. The mountains of tailings or battery sand that rose about the valley and filled houses in summer with a gritty dust, were a cyanider's dream, and in the 1930s some history plants, employing 300 men, were operating about Bendigo. The largest company, the Adelaide-based Devonshire Sands, paid out £3,700 in dividends in 1935. [1.222]

1936 Cyanide - Approximately 23 plants are operating at Bendigo, Eaglehawk, and Huntly, between 200 and 300 men employed. [2]

1937 Approximately 30 cyanide plants, employing in all about 300 men, have been operating at Bendigo, Eaglehawk, Huntly, Fosterville, and Sebastian. [2]

Tailings treatment, principally by cyaniding, in Victoria
1893 5291ozs 2dwt 2 grains of gold obtained from 43,521 tons of tailings by undisclosed processes. [3.12]
1894 2097ozs 14dwt 6 grains of gold obtained from 53,849 tons of tailings by undisclosed processes. [3.14]
1895 5380ozs 8dwt 14 grains of gold obtained from 62,319 tons of tailings by undisclosed processes. [4.10]
1896 8822ozs 15dwt of gold obtained from 115,702.5 tons of tailings by undisclosed processes, but with cyaniding now on the increase. [4.11]
09.07.1897 From the Herald we learn that the Minister of Mines has received from Mr Stone, the departmental assayer, a report on 2 tons of tailings sent to him from Axedale for cyanide experiment. Mr Stone says the lot was treated in four half ton parcels, and the results showed that the best results were secured in each successive parcel, the causes of the loss of gold and consumption being gradually found out and overcome, until in the final parcel an extraction of 74.6 per cent of the gold was obtained for a consumption of 0.53 pounds of cyanide per ton; or a cost of one shilling 4 pence for chemicals, including caustic soda. The value of the gold recovered being 7 shillings 9 pence per ton, the profit was then 6 shillings 5 pence per ton to cover cost and handling and depreciation of plant. ... Some interesting hints are added by Mr Stone, as well as a table, and the whole report is to be printed for the information of the mining community. [8]
1897 15,717ozs 4dwt of gold obtained from 161,723 tons of tailings, mostly by cyaniding. [4.10]
1898 17,845ozs 1dwt of gold obtained from 351,067 tons of tailings, mostly by cyaniding. [4.11]
1899 17,412ozs 13dwt of gold obtained from 359,848 tons of tailings by cyaniding. [4.11]
1900 28,741ozs 16dwt of gold obtained from 283,532 tons of tailings by cyaniding. [4.10]
1901 41,990ozs 10dwt of gold obtained from 482,278 tons of tailings by cyaniding. [4.11]
1902 43,302ozs 15dwt of gold obtained from 504,212 tons of tailings by cyaniding. [4.14]
1903 35,839ozs of gold obtained from 444,897 tons of tailings by cyaniding. [4.16]

□1904□48,035ozs 16dwt of gold obtained from 644,925 tons of tailings by cyaniding. [4.18]
□1905□45,221ozs 4dwt of gold obtained from 626,745 tons of tailings by cyaniding. [4.20]
□1906□44,495ozs 15dwt of gold obtained from 665,785 tons of tailings by cyaniding. [4.18]
□1907□65,961ozs of gold obtained from 983,034 tons of tailings by cyaniding. [3.17]
□1908□77,245ozs of gold obtained from 1,225,768 tons of tailings by cyaniding. [3.15]
□1909□75,429ozs of gold obtained from 1,257,338 tons of tailings by cyaniding. [3.18]
□1910□68,583ozs of gold obtained from 1,177,232 tons of tailings by cyaniding. [3.18]
□1911□59,986ozs of gold obtained from 1,102,956 tons of tailings by cyaniding. [3.20]
□1912□55,740ozs of gold obtained from 881,306 tons of tailings by cyaniding. [3.18]
□1913□45,397ozs of gold obtained from 692,256 tons of tailings by cyaniding. [3.17]
□1914□39,920ozs of gold obtained from 607,260 tons of tailings by cyaniding. [3.16]
□1915□21,511ozs of gold obtained from 317,636 tons of tailings by cyaniding. [3.12]
□1916□14,635ozs of gold obtained from 203,016 tons of tailings by cyaniding. [3.5]
□1917□8930ozs of gold obtained from 127,012 tons of tailings by cyaniding. There were 66 cyanide plants in operation during the year. [3.3]
□1918□4420ozs of gold obtained from 45,600 tons of tailings by cyaniding. There were 34 cyanide plants in operation during the year. [3.3]
□1919□4198ozs of gold obtained from 43,000 tons of tailings by cyaniding. [5.4]
□1920□4226ozs of gold obtained from 37,596 tons of tailings by cyaniding. [5.4]
□1921□5326ozs of gold obtained from 39,937 tons of tailings by cyaniding. There were 20 cyanide plants in operation during the year. [5.3]
□1922□5847ozs of gold obtained from 41,163 tons of tailings by cyaniding. There were 12 cyanide plants in operation during the year. [5.3]
□1923□3415ozs of gold obtained from 18,644 tons of tailings by cyaniding. There were 14 cyanide plants in operation during the year. [5.3]
□1924□2052ozs of gold obtained from 12,108 tons of tailings by cyaniding. There were 14 cyanide plants in operation during the year. [5.3]
□1925□971ozs of gold obtained from 8344 tons of tailings by cyaniding. There were 14 cyanide plants in operation during the year. [5.3]
□1926□1323ozs of gold obtained from 7748 tons of tailings by cyaniding. There were 7 cyanide plants in operation during the year. [5.3]
□1927□1672ozs of gold obtained from 11,060 tons of tailings by cyaniding. There were 8 cyanide plants in operation during the year. [5.3]
□1928□1199ozs of gold obtained from 6397 tons of tailings by cyaniding. There were 8 cyanide plants in operation during the year. [5.3]
□1929□772ozs of gold obtained from 4047 tons of tailings by cyaniding. There were 10 cyanide plants in operation during the year. [5.3]
□1930□There were no reports of gold being obtained from tailings by cyaniding during the year. There were no reports of cyanide plants in operation during the year. [2.3]
□1931□807ozs of gold obtained from 8933 tons of tailings by cyaniding. There were 14 cyanide plants in operation during the year. [2.3]
□1932□2060ozs of gold obtained from 39,317 tons of tailings by cyaniding. There were 22 cyanide plants in operation during the year, including 5 Government plants. [2.5]
□1933□3550ozs of gold obtained from 63,565 tons of tailings by cyaniding. There were 323cyanide plants in operation during the year, including 5 Government plants. [2.5]

□1934□14,842ozs of gold obtained from 321,104 tons of tailings by cyaniding. There were 86 cyanide plants in operation during the year, including 7 Government plants. [2.20]
□1935□22,460ozs of gold obtained from 630,318 tons of tailings by cyaniding. There were 121 cyanide plants in operation during the year, including 7 Government plants. [2.24]
□1936□28,565ozs of gold obtained from 794,640 tons of tailings by cyaniding. There were 141 cyanide plants in operation during the year, including 7 Government plants. [2.29]
□1937□41,923ozs of gold obtained from 1,233,914 tons of tailings by cyaniding. There were 157 cyanide plants in operation during the year, including 7 Government plants. [2.21]
□1938□40,384ozs of gold obtained from 1,202,623 tons of tailings by cyaniding. There were 132 cyanide plants in operation during the year, including 7 Government plants. [6.32]
□1939□43,458ozs of gold obtained from 1,358,304 tons of tailings by cyaniding. There were 150 cyanide plants in operation during the year, including 7 Government plants. [6.25]

1939□Cyanide plants at Bendigo, Eaglehawk, Ironbark, Huntly, Sebastian, Fosterville and Marong are giving in most cases payable results. [6]
□1940□38,759ozs of gold obtained from 1,225,301 tons of tailings by cyaniding. There were 188 cyanide plants in operation during the year, including 7 Government plants. [6.25]
□1941□37,050ozs of gold obtained from 1,176,936 tons of tailings by cyaniding. There were 165 cyanide plants in operation during the year, including 4 Government plants. [6.23]
□1942□19,869ozs of gold obtained from 626,643 tons of tailings by cyaniding. There were 85 cyanide plants in operation during the year, including 2 Government plants. [6.20]
□1943□6626ozs of gold obtained from 78,716 tons of tailings by cyaniding. There were 36 cyanide plants in operation during the year, including 2 Government plants. [6.19]
□1944□2936ozs of gold obtained from 59,045 tons of tailings by cyaniding. There were 19 cyanide plants in operation during the year, including one Government plant. [6.19]
□1945□2442ozs of gold obtained from 47,197 tons of tailings by cyaniding. There were 22 cyanide plants in operation during the year, including one Government plant. [6.19]
□1946□8694ozs of gold obtained from 262,810 tons of tailings by cyaniding. There were 40 cyanide plants in operation during the year, and no Government plants. [6.22]
□1947□9977ozs of gold obtained from 268,893 tons of tailings by cyaniding. There were 39 cyanide plants in operation during the year, and no Government plants. [6.22]
□1948□10,746ozs of gold obtained from 376,143 tons of tailings by cyaniding. There were 30 cyanide plants in operation during the year, and no Government plants. [6.26]
□1949□10,312ozs of gold obtained from 359,577 tons of tailings by cyaniding. There were 24 cyanide plants in operation during the year, and no Government plants. [2.34]
□1950□10,834ozs of gold obtained from 468,758 tons of tailings by cyaniding. There were 27 cyanide plants in operation during the year. [7.31]
□1951□5093ozs of gold obtained from 220,625 tons of tailings by cyaniding. [7]
□1952□1453ozs of gold obtained from 60,466 tons of tailings by cyaniding. There were 9 cyanide plants in operation during the year. [7.27]
□1953□1025ozs of gold obtained from 15,807 tons of tailings by cyaniding. There were 11 cyanide plants in operation during the year. [7.24]
□1954□789ozs of gold obtained from 14,677 tons of tailings by cyaniding. There were 11 cyanide plants in operation during the year. [7.21]
□1955□764ozs of gold obtained from 13,805 tons of tailings by cyaniding. There were 8 cyanide plants in operation during the year. [7.23]

□1956□476ozs of gold obtained from 10,785 tons of tailings by cyaniding. There were 6 cyanide plants in operation during the year. [7.23]
□1957□523ozs of gold obtained from 11,861 tons of tailings by cyaniding. There were 7 cyanide plants in operation during the year. [7.23]
□1958□569ozs of gold obtained from 11,150 tons of tailings by cyaniding. There were 5 cyanide plants in operation during the year. [7.31]