

Golden Plains Shire Heritage Database DRAFT

Database No. 327

Birthday Tunnel Co.

Berringa-Newtown Road, Berringa

Lot No. **Plan No.**

Municipal Rate No.

Architectural Style

Designer(s)

Contractor(s)

Legislative Registers	Nominated	Registered	Other Registers	Registered
Victorian Heritage Register No.	<input type="checkbox"/>	<input type="text"/>	National Estate RNE - Database	<input type="text"/>
Heritage Inventory No.	<input type="checkbox"/>	H7622-0104	RNE Legal Status	<input type="text"/>
Precinct Heritage Overlay No.	<input type="checkbox"/>	<input type="text"/>	National Trust (Vic.) File	<input type="text"/>
Precinct Heritage Overlay Nam	<input type="text"/>		Nat. Trust Classification	<input type="checkbox"/>
Individual Heritage Overlay No.	<input type="checkbox"/>	<input type="text"/>		

Statement of Significance

Victorian Heritage Register

Contextual History:History of Place:

Heritage Inventory History of Site:

BIRTHDAY TUNNEL COMPANY, Berringa

1900: work commenced. A shaft was sunk near the summit of a fairly steep hill, from the foot of which, about 20 feet above the gully, an adit has been driven westerly, intersecting the shaft at 260 feet from the entrance at a depth of 116 feet below the surface. The adit was driven to explore the Express line of reef which outcrops near the summit of the hill, to the west of the present shaft and on which a considerable amount of work had already been done at shallow depths. At 430 feet from the entrance to the adit, or 170 feet to the west of the main shaft a 30 inch formation was intersected which appears to be the downward continuation of the Express Reef. Drives north and south along the formation at this level were not promising .

12.01.1900: sending 100 tons to the Band & Lock battery; making good progress with the dam.

02.02.1900: engineers visited the site to take levels at the battery site which will be on the opposite side of the gully from the mine.

09.02.1900: large surface dam is nearly completed.

13.04.1900: good progress with erecting the 30 head battery.

07.1900: 84 ounces 15 pennyweight 6 grains of gold obtained from 170 tons of stone taken from the adit level.

07.09.1900: battery is not working well and there are frequent stoppages.

14.09.1900: battery is now working more smoothly; water is in short supply and a scheme is being investigated

Golden Plains Shire Heritage Database DRAFT

to allow water to be pumped from the a dam in the gully and conveyed by launders to the battery.

28.09.1900: a pump will be used to elevate water from lower down in the gully for use in the battery.

01.1901: 658 ounces 12 pennyweight of gold obtained from 2028 tons of stone taken from the adit level.

10.02.1901: rise taken from the tunnel above the main shaft to the surface and a portable engine was utilised for hauling stone to the surface, this could be carried deeper if required; the water supply for the battery is limited.

08.03.1901: rise up from the main tunnel is up 44 feet and should reach the surface in three weeks; water is now more plentiful and are crushing 12 hours per day.

20.07.1901: yield for the quarter of 723 ozs; 70 men working at the mine.

07.1901: 1256 ounces 17 pennyweight 6 grains of gold obtained from 4661 tons of stone taken from the adit and No. 2 levels.

31.08.1901: sufficient good stone is being broken out to keep the 40 head mill operating.

01.1902: 1274 ounces 2 pennyweight of gold obtained from 5263 tons of stone taken from the adit and No. 2 levels.

08.03.1902: a trail crushing is being sent to Ballarat to test whether Wilfley concentrating table should be installed.

12.04.1902: stopped work to install Wilfley tables.

07.1902: 492 ounces 16 pennyweight 12 grains of gold obtained from 2206 tons of stone taken from Nos. 2 and 3 levels.

30.08.1902: contract has been let to erect a permanent winding plant in place of the portable one.

24.11.1902: the winding plant is being erected.

13.12.1902: new winding plant will be available after the holidays; arranging for a supply of water from the Kangaroo Co. to avoid a shortage over summer.

22.12.1902: erection of the winding plant is nearly complete and foundations have commenced for the No.2 boiler at the battery.

1902 : 20 head battery

01.1903: 2958 ounces 3 pennyweight of gold obtained since the last six monthly report.

10.01.1903: new plant consists of a 20 inch cylinder horizontal engine with a three foot stroke and 12 foot winding drums; capable of winding down to 1000 feet.

24.01.1903: the No.2 boiler for the battery will be available in a few days.

06.02.1903: preparations are being made to construct another storage dam.

13.02.1903: with new boiler connected and the additional 10 head of stamps this will be one of the best equipped mines in the district.

07.03.1903: start made with erecting additional 10 head of stamps.

16.05.1903: the extra 10 head of battery will be ready next week.

07.1903: 5418 ounces of gold obtained from 8300 tons of stone.

1903 : 20 head battery

01.1904: 2041 ounces 3 pennyweight of gold obtained from 7470 tons of stone.

13.02.1904: several faces proved to be unprofitable and 30 men were sacked.

23.04.1904: mullocking up the old stopes so that blocks of stone previously left can be taken out.

07.1904:968 ounces 3 pennyweight of gold obtained from 4261 tons of gold.

13.08.1904: south pass is being utilised for conveying mullock from the surface to fill the stopes; preparing to construct a dam below the battery so that the water can be returned without having to pump water from the catchment dam down the gully.

14.11.1904: only 10 heads operated during the week due to a leak in a boiler which caused a suspension of the other 20 heads of the battery.

16.12.1904: surface hoppers for transportation of stone above ground instead through the tunnel will be ready after Christmas.

1904 : 30 head battery

16.01.1905: the battery has received a complete overhaul during the break and all the machinery is in good order; the tramway and hopper have been completed; large up-to-date trucks will be used for surface haulage of quartz.

01.1905: 2546 ounces 5 pennyweight of gold obtained from 12,461 tons of stone.

07.1905: 2745 ounces 11 pennyweight of gold obtained from 11,805 tons of stone.

06.1905: 20,445 ounces 2 pennyweights obtained from 65,005 tons of stone crushed to date, with 26,400 pounds paid in dividends.

10.06.1905: developing well.

24.06.1905: yielding 5 dwt per ton, with the cost of treatment at 11/- per ton and the company yields a profit.

18.11.1905: the crank of the 21 inch cylinder engine which drives the 30 head battery broke and causing the feed piston and rod, with a full head of steam on, to strike and brake the bed plate; a new cylinder will have to be cast and it is likely that a stronger engine will be erected.

Golden Plains Shire Heritage Database DRAFT

04.12.1905: started battery on Monday and the machinery is working well.

1905 : 30 head battery .

the shaft had been sunk to a depth of 634 feet and No. 7 level had been opened out at 600 feet.

22.01.1906: started new boiler.

12.03.1906: taking out foundation for new condenser at the battery.

06.1906: 4929 ounces 16 pennyweight of gold obtained from 19,350 tons of stone.

12.1906: 4227 ounces 7 pennyweight of gold obtained from 17,606 tons of stone.

02.07.1906: main shaft completed and the skids are in; the condenser and boiler tank have arrived on site.

19.07.1906: half yearly report: the work of building in the new housing of the high pressure boiler was finished; two new 1400 foot ropes were installed; a contract was let for the erection of a new condenser at the battery, and this work is now well in hand; coal hoppers have been erected at both the battery and winding engines; a system of ventilation with air pipes connected to the stack from different levels was started and is nearing completion; all the machinery is in good working order.

27.08.1906: the slide valve of the winding engine broke.

1906: 30 head battery; sinking another shaft; to extend the battery

No. 2 shaft, towards the southern boundary of the lease, had been sunk to a depth of 100 feet and a complete winding plant erected.

06.1906: 4173 ounces 4 pennyweight of gold obtained from 19,277 tons of stone.

12.1906: 3423 ounces 19 pennyweight of gold obtained from 17,784 tons of stone.

1907 : 30 head battery

No. 5 level was now 450 feet down from the surface; mine equipped with complete crushing and gold-saving appliances; baling tanks installed.

the main shaft was 155 feet below No. 7 level and No. 8 level had been opened at a depth of 125 feet below No. 7 level; No. 2 shaft was down 280 feet and levels had been opened at 132 feet and 165 feet below the sill.

06.1908: 3620 ounces 5 pennyweight of gold obtained from 19,635 tons of stone.

12.1908: 3678 ounces 9 pennyweight of gold obtained from 20,204 tons of stone.

1908 : 30 head battery

seven dividends, totalling £7000, were paid during the year. Nos. 1 and 2 shafts were connected, but the main areas of working were to the north of the No. 1 shaft.

06.1909: 3367 ounces 4 pennyweight of gold obtained from 19,265 tons of stone.

20.12.1909: the battery at No. 1 shaft was destroyed by fire.

12.1909: 3249 ounces 19 pennyweight 12 grains of gold obtained from 21,399 tons of stone; No. 2 level north was connected to the surface by a rise and an open cut was started to obtain mullock for filling the stopes in the northern end of the mine.

1909 : 30 head battery

erecting a new battery to be driven by a suction gas engine

a tailings treatment plant was erected and although the original loss was about 9 grains per ton a profit of nearly 300 pounds was made for the year.

24.12.1909: the battery was destroyed by fire; a fire started before 6 am on Tuesday 21 December, the intensity was so great that the men could not get within 100 yards; only the Wilfley tables could be saved; the engine and other parts of the machinery have been destroyed; no doubt that the 30 stamps and part of the driving mechanism can be used again; the fire started in the stoke hole when some timber was ignited by coals from the boiler which were blown about by strong winds; the wood work was burnt beyond repair and it is thought that it will take a couple of months to repair; the damage is estimated at £2000; the plant was insured with Norwich Union for £3600; the 180 men employed at the mine will be idle until the battery is repaired.

15.01.1910: sinking main shaft during cessation of stoping caused by the destruction of the battery; clearing away the debris at the mill and preparing to erect a new plant; Mr. Hansen has recommended the use of a suction gas plant for the motive power of the new battery.

22.01.1910: good progress with new battery; excavations are under way for the reception of the gas suction plant; it will be a Crossley 105 hp plant purchased for £1500, this class of engine has been in use at Bendigo for 18 months and gives very satisfactory results; the underground cisterns are in position and the dam is constructed so that everything is ready to sink the shaft another 200 feet.

05.02.1910: excellent progress with reconstruction of the battery; the boxes and horses are nearly all in position and they are now in position and being connected with the wiper shafting; the suction gas plant is on the road from Melbourne and the concrete foundations have been poured.

12.02.1910: suction gas plant has arrived from Melbourne and is being placed in position.

26.02.1910: most of the heavy machinery is in position with the hoppers and the other parts of the battery ready for building in.

19.03.1910: newly erected mill given a trial and crushing operations are expected to be in full swing next week; more men will then be employed below to break out stone.

03.1910: the new battery, driven by a 104 horsepower suction gas engine was started.

Golden Plains Shire Heritage Database DRAFT

06.1910: 1321 ounces 8 pennyweight of gold obtained from 11,672 tons of stone.
12.1910: 2846 ounces 14 pennyweight 12 grains of gold obtained from 24,398 tons of stone.
1910 : 30 head battery ; suction gas engine erected; fuel saving 50 per cent.
No. 1 shaft was sunk a further 200 feet and No. 9 level was opened at 925 feet from the surface. No dividends were declared during the year due to the cost of the new battery, mine development, and the lower returns from crushings.
06.1911: 2640 ounces 12 pennyweight of gold obtained from 21,527 tons of stone.
12.1911: 2843 ounces 12 pennyweight of gold obtained from 23,177 tons of stone.
1911 : 30 head battery
06.1912: 1521 ounces 8 pennyweight of gold obtained from 15,075 tons of stone.
12.1912: 1156 ounces of gold obtained from 8612 tons of stone.
1912 : 30 head battery
the lower levels of the mine were abandoned as unprofitable.
06.1913: 1173 ounces 5 pennyweight of gold obtained from 9874 tons of stone.
12.1913: 1211 ounces 10 pennyweight of gold obtained from 12,213 tons of stone.
1913 : 30 head battery
06.1914: 1033 ounces 2 pennyweight of gold obtained from 8902 tons of stone.
12.1914: 1088 ounces of gold obtained from 7980 tons of stone.
1914 : 30 head battery
06.1915: regular crushings were suspended, and the battery was only operated whenever there were parcels of stone available.
614 ounces 14 pennyweight of gold obtained from 5591 tons of stone.
12.1915: 146 ounces 1 pennyweight of gold obtained from 1354 tons of stone.
1915: No. 2 shaft was sunk 250 feet and connected with No. 5 level from No. 1 shaft.
06.1916: 261 ounces 13 pennyweight of gold obtained from 1,640 tons of stone.
12.1916: 138 ounces 1 pennyweight of gold obtained from 572 tons of stone.
1916: the level south of No. 2 shaft was continued towards the Kangaroo shaft a distance of 380 feet.
1917: crosscut was driven, with the aid of a Government grant, 746 feet east from the south drive at No. 5 level in No. 2 shaft to locate the Kangaroo Reef, but without success. A prospecting shaft was sunk on the hill top 300 feet north of No. 2 shaft and crosscuts driven 31 feet east and 57 feet west at the 80 foot level. In the west crosscut a formation 5 feet wide was intersected, but a bulk crushing failed to prove the stone payable, and all work was suspended about the middle of the year.
mine closed, and plant and machinery sold to Miller and Company of Ballarat for £3077 10s.
1899 to 1917: formed in 1899 and commenced by driving an adit; after 1905 mining was conducted on the 'rill' system; a large amount of prospecting and development work was done with drives reaching 1500 feet north and south of the main shaft, and crosscuts 1000 feet east and 500 feet west; from 1899 to 1917 crushed a total of 389,037 tons for a yield of 73,472 ozs, paid dividends of £68,000, calls totalled £28,897, and wages of £193,000 were paid.
1902 to 1916: recorded production from 376,165 tons of 69,989 ozs 4 dwt, or from 382,202 tonnes 2,176.958 kg.

Description

Victorian Heritage Register

Description:

This site is within a relatively steep sided gully. The shaft, winder and other foundations, mullock heap, open quarry are atop the west side of the gully. In this part of the site the brick winder and winding engine foundations are west of the shaft site together with a badly corroding boiler. The remains of a forge on a levelled bench is located south of the shaft, and some levelled areas formed by stone retaining walls are north of the shaft. Three fingers of mullock between 25 m and 45 m long fan around from the east to the southern side of the shaft. The main entrance to the adit is apparently located below the mullock heap but was not found during this inspection. A spectacular large open cut, apparently excavated from beneath, is located between 50 and 100 m north of the shaft. The remnants of a number of dams are located along the gully over a distance of a few hundred metres. While the remains of the most recent battery, that was constructed early in 1910 to replace the battery destroyed by fire the previous December, are on the east side of the gully, opposite the shaft. Also on the east side of the gully approximately 200 m south of the battery is the explosives magazine, which was made by excavating a short adit into the side of the gully. An interesting aspect of this site is the method of working in steep country and particularly the 'glory hole' open cut, and the comparisons that can be made with the other mines at Berringa which worked on level sites. In steeper topography the plant was sited near the dams which had to be sited in the gullies, as opposed to level sites where dams tended to be excavated in the most convenient location near the shaft.

History

Thematic Context

Recommendations