
ELECTRO HYDRAULIC CO. SLUICING SITES AT HARD HILLS

Location

KELLY ROAD SNAKE VALLEY, PYRENEES SHIRE

Municipality

PYRENEES SHIRE

Level of significance

Heritage Inventory Site

Heritage Inventory (HI) Number

H7622-0362

Heritage Listing

Victorian Heritage Inventory

Hermes Number 11695

Property Number

History

Contextual History:History of Place:

Heritage Inventory History of Site:

08.07.1858: At Linton population is 2000 including 400 Chinese; Bloomers and Nuggetty Gullies have 4 puddling machines and accompanying dams; Hard Hills has 8 puddling machines and dams.

ELECTRO HYDRAULIC DREDGING OR SLUICING CO.,

1904: John Dawson, an electrical engineer who worked with Lord Kelvin in London and had worked on the electricity supply for Geelong and Ballarat, decided to build a dam and power house to be used to pump water into the nearby hills for sluicing. The dam, known as Dawson's Dam was 15 feet deep and was a mile in circumference. The outlet of the dam was washed away some time after mining operations ceased. The dam on

the east side of the Linton-Snake Valley Road is now used as part of a camp. The power house was a large English style building, which housed the generator and pump. Water was pumped into the hills where two nozzles were used to direct water on the hill being washed away. Two gravel pumps on barges were used to pump the material through the sluices.

08.07.1905: proposal to work the Hard Hills with hydraulic dredges of about 600 to 1000 hp.

09.09.1905: excellent progress being made in constructing the water storage using five 3 horse teams ploughing and scooping.

07.10.1905: making the dam, the bank of which is opposite Chibnell's; capacity will be 100 million gallons; the site has been chosen for the power station and the cost of the plant and preliminary works is £10,000; the company is proposing to commence with four dredges worked using electric pumps; the pumps only weigh eight tons and they will be able to follow shallow runs of wash; will operate at 50% of the cost of the steam driven dredges.

23.12.1905: caught a good deal of water in the dam and are presently engaged making roads and will start erecting machinery early in the new year.

20.01.1906: the boilers will soon be delivered; the electric dynamos and engines have been ordered from England; plans and specifications have been prepared for the power; barge sites and cable lines are being prepared; will commence with two dredges and if prospects are will erect two more and eventually there could be up to eight.

18.08.1906: directors to visit site; no expense is being spared; the engine and dynamo arrived in Melbourne on board the S.S. Ayrshire from the Westinghouse Works in London; the machinery is claimed to be far superior to anything of its kind in the Commonwealth; a number of electrical engineers are on the ground.

01.09.1906: the power house is completed and the work of erecting the engine and generator should be finished in about two weeks.

22.06.1907: company has come through the initial troubles and a second nozzle will soon be at work; there is power enough for three nozzles; the company has won £999 worth of gold.

05.10.1907: cleaned up for 79 ozs 1 dwt 5 gr; previous yield was 224 ozs; the falling off was not explained an a 3d call was made for the purpose of installing a suction pump; the ground is considered but cannot be worked by gravity and it needs to be elevated for treatment; Mr. McMillan formerly of the Scarsdale Co. has been appointed as dredge master.

14.12.1907: annual meeting was optimistic about the prospects of the company; during half year the company treated 2 acres for a yield of 494 ozs.

04.04.1908: after six weeks work the yield was 351 ozs from 0.75 acres; this will leave a fair amount of profit; working with one small pump and two nozzles, a second gravel pump would have given a better result.

23.05.1908: working three shifts; new gravel pump delivered.

18.07.1908: half yearly meeting: in the 4.5 months since the gravity system was replaced with an elevated one 770 ozs valued at £3211 had been won; at a rate of return of £694 per month and paying costs of £329.

14.11.1908: monthly yield of 300 ozs 16 dwt; profits of the last two years have paid off the amounts outstanding on machinery and plant so that the company has only to meet its overdraft; prospects seem good; operating two plants enables double the amount of work; a saving in fuel was achieved by the adoption of new fire bars for the Babcock & Wilcox boilers by Mr. Dawson; this economy will be extended by the installation of a condenser which is on order.

09.01.1909: half yearly report: yield of 1178 ozs from 4.5 acres of shallow ground which averages 3 pence per cubic yard; of this 910 ozs were won in the last three months; working expenses were £4720 14s 4d; gold obtained valued at £4847 15s 6d; giving a profit of £145 14s 4d.

13.12.1909: most hands put off because of a lack of water; the pumps could not raise water from the Western Star shaft; will attempt to get water from Bottle Hill; lack of water and a poor yield of 150 ozs caused the value of the shares to fall.

06.03.1909: tapped a big volume of water in an old lead near the power house and sluicing will resume shortly.

17.04.1909: stopped again by a shortage of water, the lead has dried up.

24.04.1909: yield for the quarter of 192 ozs.

17.07.1909: yield for the quarter of 325 ozs.

27.11.1909: both plants are working ground and prospects are favourable for a good finish to the year.

07.01.1911: an extraordinary meeting of shareholders considered a proposal to increase the capital of the company; the shareholders were unhappy with the manager and his continual glowing reports; only 20 out of 300 acres has been treated; the steam shove has been a great success, it can take out 50 yards per hour as opposed to 10 with the nozzle; it has also reduced costs to 5 pence per yard compared to 10 pence per yard; the shareholders voted to increase the capital; following the meeting the manager resigned.

1911/12: operations ceased when insufficient gold was being obtained to make the operation payable.

1907 to 1911: recorded production of 4627 ozs 2 dwt or 143.922 kg.

One of only three electrically powered hydraulic dredging operations in Victoria, at this time.

This place/object may be included in the Victorian Heritage Register pursuant to the Heritage Act 2017. Check the Victorian Heritage Database, selecting 'Heritage Victoria' as the place source.

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