
NAME: GLENLOTH GOLD BATTERY

PLACE NO.: C20 25

Address: Glenloth Gold Battery
Lake Harris
via.Kingoonya SA 5710

ASSESSMENT OF HERITAGE VALUE:

Description:

Glenloth is the most isolated of the Government Batteries, set in a featureless saltbush plain on the shore of Lake Harris, at the western end of the Lake Gairdner National Park. The nearest township is Kingoonya on the Trans-Australian Railway, about 50km north. The mines that supplied the battery are some distance away in low hills to the south and west. The battery is a gabled cgi building, rectangular in plan, containing a set of ten gravity stamps, an oil engine and Wilfley tables. The manager's residence, office, workers' quarters and site of the earlier abandoned battery and cyanide plant are nearby. The area is littered with discarded machinery parts. The battery tailings have been re-treated by heap leaching.

Statement of Heritage Value:

Glenloth Gold Battery is of heritage value as an example of early twentieth century gold treatment technology, and because of its association with the Mines Department's efforts to provide work for the unemployed during the Great Depression.

Relevant Criteria (Under Section 16 of the Heritage Places Act 1993):

- (a) It demonstrates important aspects of the evolution or pattern of the State's history
 - (c) It may yield information that will contribute to an understanding of the State's history, including its natural history
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RECOMMENDATION:

It is recommended that Glenloth Gold Battery be provisionally entered in the South Australian Heritage Register, and that it be declared a place of archaeological significance.

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- (a) It demonstrates important aspects of the evolution or pattern of the State's history**

The 1920s saw Australia's mining industry plunge into depression as base metal prices collapsed after the First World War. This was a traumatic experience for South Australia, where copper mining had been a mainstay of the economy since the 1840s. The enormous Moonta and Wallaroo mines closed in 1923, and throughout the 1920s and 1930s copper and lead were simply not worth mining. The exception was gold; South Australia saw an upturn in mining in the 1930s because, perversely, gold mining becomes more profitable during times of economic depression. The price of gold had been fixed at just over £4 per troy ounce for many decades, but in 1931 it was floated, and immediately began to rise steadily, doubling in value to £8 by 1934, and quadrupling to £16 by 1949. Unemployed men were encouraged to try their luck on abandoned goldfields. In addition, the Commonwealth offered a bounty on all new gold production, and the South Australian Department of Mines also offered more generous subsidies to new mines in the hope of assisting the State's moribund mining industry.

Historically, gold mining had not been very important in South Australia, but in the 1930s it was one of the few bright hopes on the horizon. The Mines Department took on a new role of providing the conditions in which mining activity could take place. One obstacle to new mining ventures was that aspiring small gold miners had no access to treatment plants for their ore, so the government would provide these, a doctrine that Director of Mines Keith Ward spelled out in the depths of the Depression:

It has been found throughout Australia that hard times turn the attention of the community to mining and that more prospecting is carried out at such times than at any other. I hold the view that a relatively small increase in expenditure is more than justified, in that the mining and prospecting work does absorb many men who would be otherwise unemployed, and moreover the State requires prospectors to be at work in order that new discoveries may be made to take the place of the mines that are worked out. (Ward 1933)

Hence the department constructed five State Gold Batteries and Cyanide Works to treat ore from small mines, with Federal Unemployment Relief funds. The older State-owned batteries at Mount Torrens, Tarcoola, Peterborough and Glenloth - some originally purchased from private owners - were re-fitted with new diesel-powered crushing machinery ordered from Forwood Down and Company in Adelaide. A new battery was built on the site of a recent gold discovery at Mongolata. Glenloth had been mined intermittently since 1903, and the field was fortunate in having its mining costs reduced when the Trans-Australian railway opened in 1917. The State government had bought a small battery there in 1907, but it closed in 1924. The new diesel-powered battery with its ten stamps, built just north of the older site was at work by 1935.

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Crushing charges were kept low to subsidise the mining industry, so that the battery ran at a loss to the State. Small ore parcels - under a hundredweight (51kg) - were treated free of charge to encourage prospecting. The design of the plant was also made deliberately inefficient, because part of its function was to create work. At a normal commercial gold battery, ore would be delivered into an overhead bin, from where it was fed by gravity into a primary crusher to break the stone down to fist-sized lumps, which were then fed automatically into the stampers for fine crushing, with no human effort involved in the processes. At Glenloth, the ore was instead delivered onto a flat floor beside the stamps, where it was broken up by hand with sledgehammers, and shovelled into the stamper boxes. After crushing, the gold ore passed as a wet slurry over mercury plates which collected some of the gold as an amalgam, then into cyanide tanks where the remaining gold was dissolved, to be extracted from solution later. The finely crushed ore, known as tailings, still contained some gold, and was stored in dumps or heaps for possible future re-treatment.

The Glenloth battery had the smallest production of the government gold treatment plants. It operated until the 1950s, by which time gold mining was economically less attractive to small-time gougers, and the plant closed in 1963. The tailings heaps were leached for their residual gold content in the 1980s. The battery was intact and maintained for decades, but is now in ruinous condition.

(c) It may yield information that will contribute to an understanding of the State's history, including its natural history

The isolation of the Glenloth gold battery site has kept it relatively well-preserved from human intervention. Very little equipment taken to the site was ever taken away, so there is a large deposit of broken, worn and outmoded machinery parts in the vicinity. The layers of history on the site can readily be seen, and it would be a good candidate for an industrial archaeology study.

References

- H.Y.L. Brown, *Record of the Mines of South Australia*, 1908
Greg Drew, *Goldfields of South Australia*, 2004
John Drexel, *Mining in South Australia*, 1982
Mineral Resources Review, No. 17, 1912, pp.808-810; 23, 1915, p. 64

Twentieth Century Heritage Survey, Stage Two (1928-1945)

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SITE RECORD:

FORMER NAME: n/a

DESCRIPTION OF PLACE: Industrial building housing gold crushing machinery

DATE OF COMPLETION: 1935

REGISTER STATUS: **Description:** n/a
Date: n/a

CURRENT USE: **Description:** n/a
Dates: n/a

PREVIOUS USE(S): **Description:** Gold Battery
Dates: 1935-1963

ARCHITECT: **Name:** n/a
Dates: n/a

BUILDER: **Name:** Department of Mines
Dates: 1935

SUBJECT INDEXING: **Group:** Mining & Mineral Processing
Category: Crusher

LOCAL GOVERNMENT AREA: **Description:** Unincorporated

LOCATION: **Unit No.:** n/a
Street No.: n/a
Street Name: n/a
Town/Suburb: Via Kingoonya
Post Code: 5710
Region No.: 13
Region Name: Far North & Far West

LAND DESCRIPTION: **Title Type:** CR
Volume: 5759
Folio: 724
Lot No.: H834500 S111
Section: 111
Hundred: Out of Hundreds

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SITE RECORD (Cont.):

AMG REFERENCE:

Zone: 53
Easting: 512419
Northing: 6558064
Map Sheet No.: Kokatha 5935
Map Scale: 1:100,000

OWNER:

Name: PIRSA
Address: GPO Box 1671
Town/Suburb: Adelaide
Post Code: 5001

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Glenloth Battery, looking south-east, Lake Harris in background



Glenloth Battery, looking north-east, abandoned boiler in foreground

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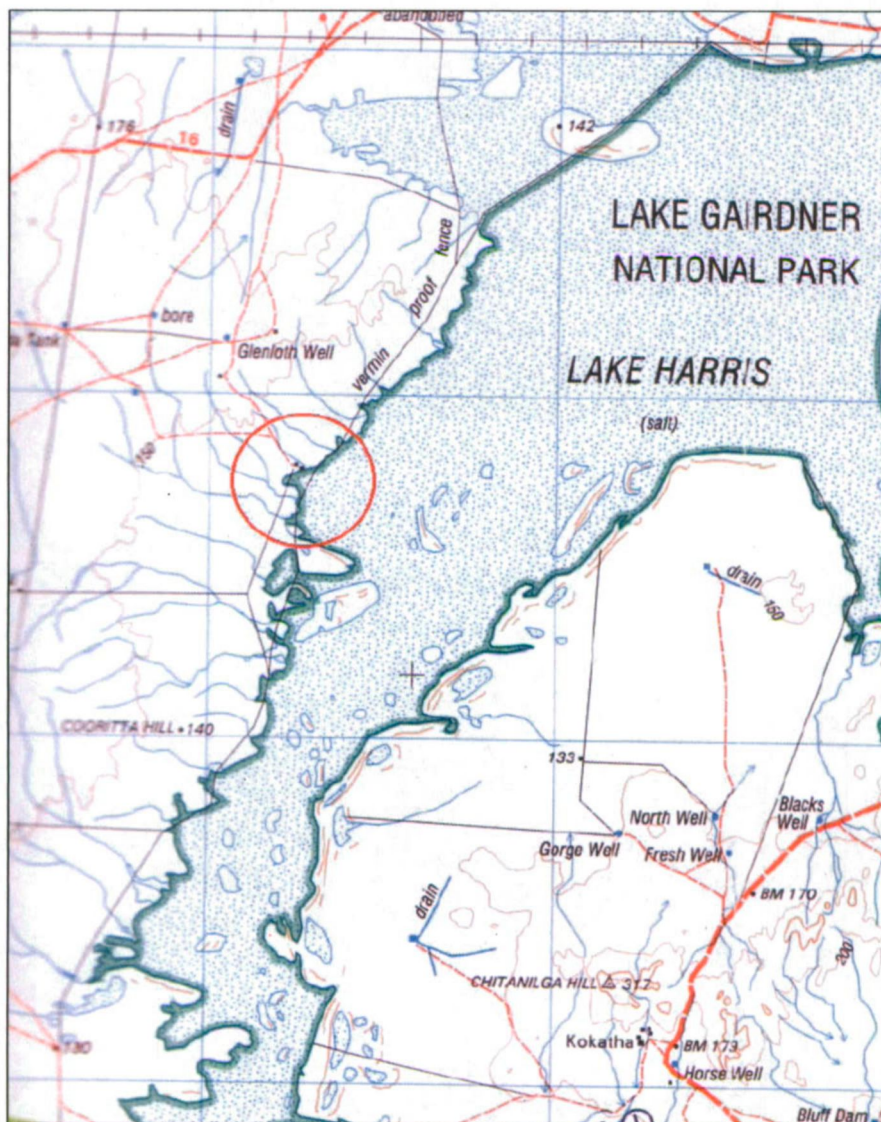
Gravity stamps, Glenloth Battery



Workers' quarters, Glenloth Battery

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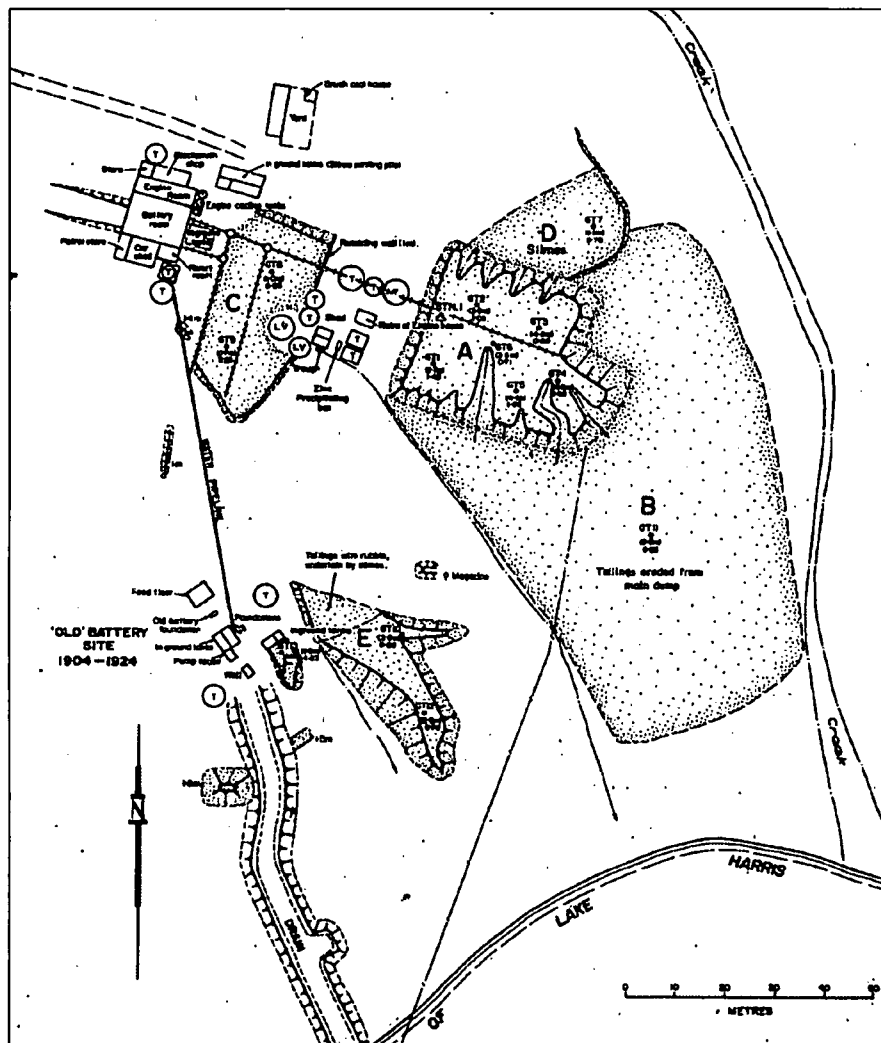
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Location of Glenloth Battery
(Gairdner SH53-15 1:250,000 Map)

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Plan of Glenloth Battery, 1987
(PIRSA Plan)