

Arltunga Historical Reserve

The Government Works Self Guided Walk



The Government Battery and Cyanide Works, established in 1898, was a facility for crushing and processing ore worked from local mines. Until mining activity faded in 1913, this was the heart of the Arltunga Goldfield. There were more people and closely grouped buildings at this site than anywhere else in Arltunga. The buildings you will see were the offices or houses of government workers and the machinery was part of the gold extraction process, which is fully described in the Gold Extraction information sheet available from the Visitor Centre.

Use this leaflet as your guide to the buildings and other sites in this area, identified by numbered posts. The full walk takes about 40 minutes to complete. Take-home copies of this leaflet can be obtained from the Visitor Centre.

1. The Assayer's Residence

The Assayer was probably the second most senior of the government officials. He might be called a gold chemist. His job was to account for the gold at every stage of the extraction process. His house was one room, which was not unusual for Arltunga. What is unusual is the elaborate kitchen at the rear. Notice the 'dutch oven' stacked with rocks to hold in the heat after the coals were removed.

2. The Manager's Residence

This was the most impressive residence at Arltunga in its day. It had two large rooms and a verandah back and front. The

manager's job was not an easy one. He was responsible for seeing that the battery operations ran smoothly and being the most senior official on the field, he was often called upon to settle disputes between different groups in the community.

3. The Post Office

From early photographs it is known that this was the Arltunga post office. The mail run went every two-weeks between here and Adelaide. If this seems slow, consider that supplies came in from the south by camel about every three months. The building originally had three walls of 'wattle and daub' (mulga posts buried in a tight row, with mud or daub filling the gaps). Like almost all of the old structures at Arltunga, only the stone component remains.

4. The Battery Site

Extracting gold from ore was a complicated business that included a series of mechanical and chemical processes. Unfortunately most of the old machinery which stood here is gone. If you want to learn the complete process, pick up a Gold Extraction information sheet from the Visitor Centre.

The energy to crush and sort the ore came from the large, wood-fired boiler. The steam it produced drove the horizontal engine, turning the big pulleys, which were connected by leather belts to the crusher and battery. Look for the deep foundation of the ten-stamp battery.

The battery reduced the ore to fine silt. Gold was 'filtered' out with mercury as the ore flowed over the amalgamating plates, then it was further separated by the shaking action of the wilfley tables. The finest gold was extracted by leaving the gold-bearing silt in a cyanide solution in the round, in-ground tanks. The gold, was dissolved by the cyanide making it easy to extract from the tailings.

5. Gold Room and Offices

The room on the end of this building was where the Assayer did his most important work. Gold was tested for impurities before the Assayer weighed it and paid the miner for his efforts. In relative terms, gold was worth about three times more than it is today. The two adjoining rooms were the offices of the Manager and Assayer. The close proximity of the offices to the activity of the battery must have caused problems for these men. Noxious fumes from the chemical treatments wafted through the office. The battery was very noisy, produced much dust and made the ground shake.

6. Star of the North Well

There were six wells in common use during the active days of the goldfield. The Star of the North was sunk in 1892 and was the second best in the area. It could deliver over 8000 litres of water per day. This much was necessary to allow full operation of the battery. The well is 24 metres deep and has horizontal



Arltunga Historical Reserve

The Government Works Self Guided Walk

drives at the bottom to increase the yield. The windmill and tank were erected in the 1950s for pastoral use but have not worked since 1975 when the area was declared an Historical Reserve.

7. Assay Building

This second assay office was built in 1905, a few years after the first. Miners had complained that in the first office the ground shook when the battery was working, making it impossible for the Assayer to weigh the gold and hence pay them correctly. As with the first gold room, there is a large solid chimney with a small cavity at its base and stone benches where the assayer stored the tools of his trade.

8. Worker's Hut

It is likely that only the Battery Manager and Assayer had housing built for them by the Government. The battery workers who were locally employed were probably forced to build their own huts as the opportunity arose. This is a fine example of a worker's hut. Note the expert use of local materials. The floor is in particularly good condition.

9. Blacksmith's Shop

This three-sided stone building is what remains of the Blacksmith's workshop and behind was his main forge. As a government employee the 'Smithy' was more the battery engineer. In this regard he was no doubt kept busy. The battery was prone to regular breakdown and if this happened for extended periods the whole field 'went down' with it. Being a person with great depth of technical ability he was probably put to building and carpentry as well.

10. Mystery Mudhouse

The history of this building is unknown. Its style of construction is interesting however, being somewhere between that of the other government buildings and a miner's house. Being of soft mud mortar construction, it has decayed more than most in this area. It is possible that the building was one of the first on this site, and existed before the area was declared a Government Reserve.

