


Division of Mines and Mineral Resources — Report 1990/15
**The Mount Cameron Water Race
— a century of operation**
by G. J. Dickens
THE FIRST 20 YEARS

After prospecting on the West Coast, George Renison Bell turned his attention to the North East where in March 1874, he discovered alluvial tin along the Boobyalla River near Little Mount Horror¹. This led to the establishment of the Boobyalla Tin Mining Company. Although this mine only operated for approximately six months, it heralded the dawn of tin mining, not only in the North East, but more importantly in the Gladstone district.

The first recorded tin leases at Mount Cameron were established during December 1874. In February and March of 1875, Scottish-born James C. Ogilvie, together with his son Charles, established leases along the Ringarooma River in an area known today as Ogilvies Bridge. Charles Alexander Ogilvie was later to play an active role in the future development of the Mount Cameron Race.

Later, in June of the same year, James Brown established an 80 acre* tin lease at Mount Cameron. He also became a key figure as Manager of the mining company which constructed the original section of the Mount Cameron Water Race.

Because the Gladstone area was virtually an alluvial tin field, a supply of water was essential for sluicing. This need resulted in an extensive network of water races and dams. The principal system in this area was partly constructed by the Mount Cameron Hydraulic Tin Mining Company, which held leases at Gladstone. In 1881, the company commenced building a water race from Musselroe Creek. However, by the time it had reached Edina Sugarloaf, company finances were almost exhausted. This first stage of construction was completed in 1882².

A Government select committee in 1885 recommended that the unfinished main race, together with the Amber Creek branch, be purchased and extended at a cost of not exceeding £18,000³. The purchase of what officially became the Mount Cameron Water Race was finally authorised by an Act of Parliament in December 1887. At the time, the race comprised 12½ miles of main race and 9 miles of branches, and cost £4,750⁴.

The Mount Cameron Water Race Board was immediately established to take control of the water race. The Board consisted of the Secretary of Mines (who was also Chairman), the Chief Inspector of Mines, the Commissioner of Mines for the District, and two Members who were annually appointed by the Governor in Council⁵. James Brown was appointed

Acting Manager of the race, commencing duty in February 1888.

The first meeting of the Board was held at Gladstone on Thursday 9 February 1888. Initially, the most important task confronting the Board was the restoration and maintenance of the existing portion of the race after almost six years of neglect. Extensive weed growth and silting had reduced the capacity and flow of water along many sections of channel. Supervised by Manager Brown, a 15 man labour force completed the rehabilitation in three months⁷. Following this, the second stage of construction was commenced. This was the 6 miles of main race to be constructed from Musselroe Creek to a new intake on the Great Musselroe River. The Acting Manager was also appointed to supervise the start of construction work, this work being completed in 1889. Meanwhile, the first sale of water occurred in August of 1888. The next project to be undertaken was the construction of a 15 mile extension towards Gladstone through country on the eastern side of the Ringarooma River. The construction contract was estimated to cost £18,500⁸. It was to take a further two years to finally complete. This new section was known as the Northern Extension.

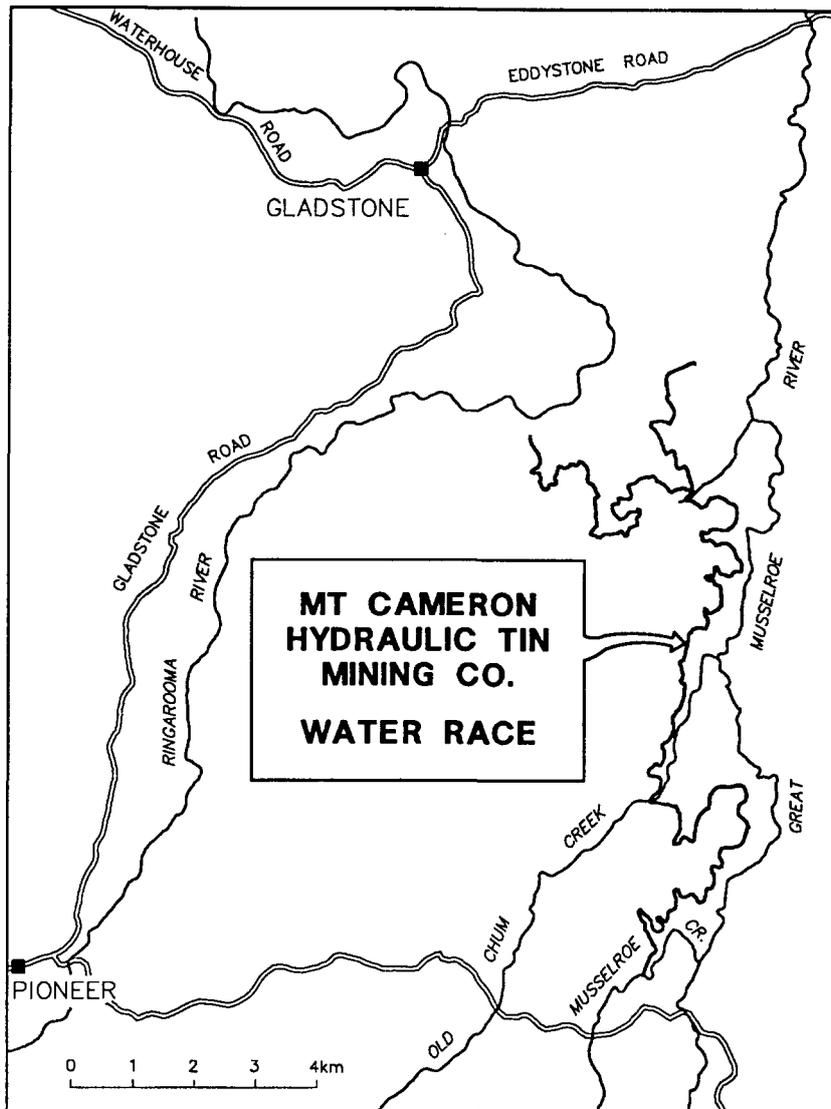
Although the Mount Cameron Hydraulic Tin Mining Company had acquired a water right on the Great Musselroe River, it was decided to build an intake on Musselroe Creek to speed up construction and to save money. This work was started in 1881 with the construction of a temporary log dam, which directed water into wooden fluming about ¼ of a mile in length which ran down the course of Musselroe Creek and into the race. With a permanent concrete dam, the water carrying capacity at the intake would increase from 6 to 9 "sluice-heads" to 12, as the temporary dam allowed at least 3 heads of water to run to waste. An attempt to channel 3 heads of water from Ogilvies or Old Chum Creek into the race had been started but later abandoned. Therefore, the existing 12 miles of race only had the potential capacity of 15 heads⁹. This, of course, was hardly enough to satisfy existing customers along the way.

Because of the rocky nature of the country and the numerous creek crossings, the 6 mile Southern Extension was estimated to cost about £4,000 which was beyond the financial resources of the Company. This led to the inevitable purchase by the Government in 1887.

The first permanent manager was Michael J. Griffin who took up his appointment in October 1888. His initial two years saw the completion of the second stage of construction.

* Because most information on the race uses "rounded" Imperial units for length and area, no attempt has been made to convert these to metric equivalents. Pre-1966 monetary values are in pounds. One pound is equal to two dollars.

MOUNT CAMERON WATER RACE 1881-1888



The 6 mile Southern Extension was completed during 1889. This extension included three 2½ ft diameter steel syphons and 18 flumings. The syphons were located at Cascade Creek (463 ft), Bald Hill (530 ft) and at Musselroe Creek (354 ft), which was the original intake¹⁰. Extensive wooden fluming was necessary to alleviate the cost of expensive channelling through granite.

Also during this period, the original 12 mile main race was extended in a northerly direction beyond Edina Sugarloaf by means of two long steel syphons, No. 4 (3730 ft) and No. 5 (4200 ft). From the outlet of No. 5 syphon, which spanned a 90 ft depression of the Edina Valley, the race meandered for a further 11½ miles to the No. 6 or Scotia syphon (3105 ft). Like the previous two syphons, this was constructed of 3 foot diameter steel pipes 20 feet in length¹¹.

It is worth noting that all six syphons were constructed of pipes made from ¼ inch mild steel plate, of 19' 7" long sections, with spigot and faucet joints caulked with lead wire and rope yarn. The total length of each syphon is indicated in brackets. The Scotia Syphon was eventually selected as the site to perform the official opening of the Mount Cameron Water Race¹².

The opening ceremony took place on Thursday 21 August 1890. With many local residents and visitors present, Sam

Hawkes MHA, representing the district, turned on the water and formally declared the Race open. This was followed by a banquet in the Gladstone Town Hall¹³. The 33 mile main race from the Great Musselroe River intake to the No. 1 Government Reservoir at Mathewsons Lagoon was finally open for business.

Accommodation was provided for four maintenance staff known as Channel Keepers. Cottages were sited at strategic points along the main race. The first cottage was built alongside the Scotia Race about 2 miles north of Gladstone. Known as Scotia Cottage, it was completed in July 1890.

Chum Cottage followed three months later. This was located 9 miles south of Gladstone close to Old Chum Creek. August 1891 saw the completion of Cascade Cottage which was alongside the intake on Cascade Creek. Situated 16 miles south of Gladstone, the cottage also provided a convenient base to service the main intake on the Great Musselroe River.

The last of the Channel Keepers' cottages was built alongside the No. 4 syphon on the southern side of Edina Sugarloaf. Known as Edina Cottage, it was partly built from sections of James Brown's original mine residence which was transported to the site in September 1892.

The four cottages were built to the one simple plan of four main rooms, iron exterior walls, iron roof, two chimneys and pine-lined interior walls.

The Manager's Gladstone residence and office was completed in May 1890 at a cost of £480¹⁴. The plan of the building was adapted from the standard railway station residence design specifications.

As Manager Griffin had been temporarily accommodated at the Gladstone School residence, there was an urgency to provide him with a house before constructing the other cottages¹⁵.

All five residences were built on 5 acre reserves vested with the Mount Cameron Water Race Board.

During 1893, the first section of the original wooden fluming (No. 40) was replaced by an earth channel. Built in 1881, it was the last of the wooden fluming on the original 12 mile section. The 90 feet section on low trestles was sited in the first creek gully south of Dam Hill. It took a further two years before the next fluming required replacement.

In May 1895 the replacement of the 160 ft long, 60 ft high No. 25 wooden fluming by a 1034 ft contour race channel and embankment was completed at a cost of £350¹⁶. It was sited in a double creek gully about one mile north of the Musselroe or No. 3 syphon. As a result of the second replacement, the Board initiated an urgent report on the condition and possible replacement costs of the remaining flumings. Race Manager Griffin achieved this daunting task by June 1896¹⁷.

The following 18 months saw the replacement or rehabilitation of all fluming along the original 12 mile main race at an approximate cost of £1,500¹⁷.

During the first 20 years, the existence of the Amber Branch virtually went unnoticed. Constructed as part of the Mount Cameron Hydraulic Tin Mining Company's race network in 1881, the 5 mile long branch supplied permanent water to their leases near Amber Hill.

When the Government acquired the Race in 1887, the Branch was in urgent need of repair. It saw very little use until the early 1890s, when several lease holders moved into the area west of Amber Creek. However, these claims could only operate for four months of the year using only surface water drainage.

During 1892, the Board was strongly urged to upgrade the Branch to supply water for these claims. A survey was promptly carried out which recommended a 1600 ft long steel syphon across Amber Creek (inverted, laid on the ground) at an estimated cost of £261. The survey also included bridgeworks, fluming, earth cuttings (1650 yards east of syphon and 330 yards west of syphon), embankments and cleaning out of the remaining section of the old race¹⁸. The new syphon would replace about two miles of original channel which skirted the head of the gully carrying Amber Creek. The reconstruction was completed by March 1894¹⁹.

As soon as the Branch was back in service Charles A. Ogilvie immediately constructed a connecting race (running parallel and south of the Amber Branch) from the Amber Syphon outlet to his own steel syphon crossing the Ringarooma River approximately one mile upstream from Ogilvies Bridge. Ogilvies Syphon was built 160 ft above river level, while the race had a water carrying capacity of 8 sluice-heads. According to the Board's monthly report for December 1896, Charles Ogilvie was employing 36 Chinese who were working his Enterprise and Edina tin leases.

It appears that during 1899, the Amber and Ogilvies Syphons were beginning to leak badly (combined wastage of one sluice-heads). By November 1902, the Amber Syphon had been dismantled while Ogilvies Syphon had been abandoned²⁰.

After 1900, there appeared to be little mining activity in the areas around Amber Hill. It seemed that the Amber Branch had reached a state of limbo.

AFTER 40 YEARS — AN UNCERTAIN FUTURE

The ensuing years to 1906 saw little change to the race apart from normal maintenance. Despite an unfavourable report by Griffin in June 1904 on the condition of the wooden fluming along the race, it took another two years of procrastination by the Board before replacements were effected²¹.

Appointed as Engineer of Works in April 1905, Frank S. Grove was given the daunting task of eventually replacing all fluming with earth channelling²². Work commenced during June 1906, replacing firstly those flumings most likely to collapse. The last of the 25 flumings was replaced by November 1910. The one exception was the iron fluming across Old Chum Creek, which was installed during June 1905. The cost of replacing the old wooden structure was £639/10/-. At the same time, a new race was cut to connect Old Chum Creek with the main race, after the Government had purchased the water right from James Ogilvie for £75²³. This provided an increase of seven sluiceheads of water to the main system at a cost of £565.

Meanwhile the first of the steel syphons built in 1889 was earmarked for replacement. No. 4 syphon was replaced in 1908. Now with a reduced diameter of 2½ feet and shortened by 540 feet, the new column was relocated west of the original

site²⁴. No. 5 steel syphon was replaced with 27 inch diameter pipes by April 1909²⁵.

Late 1910 saw the start of the construction of the No. 3 and No. 6 wood-stave syphons. Now 20 inch and 30 inch diameter respectively, these were a departure from the traditional iron and steel pipe columns²⁶.

The replacement of all syphons was completed during 1911, when syphons No. 1 and No. 2 were each replaced with an earth channel²⁷. Important works carried out during the period 1910–15 included the construction of the Empress Race (1910), Aberfoyle Race (1914) and Doone Race (1915), as well as extending the Scotia Race (1910). It was to be another seven years before the third and final stage of construction came to fruition.

After 40 years of valuable service to the eastern side of the Ringarooma River, the Mount Cameron Water Race was facing an uncertain future.

THE WESTERN DEVIATION — A CHANGE OF DIRECTION

By 1920, most of the worthwhile alluvial tin deposits serviced by the Northern Extension were regarded as 'worked out'. It was about this time that attention was focussed on the untouched areas around Gladstone.

In July of 1921, Government Geologist Loftus Hills submitted a report on the mineral resources on the western side of the Ringarooma River, especially in the area to the west of Gladstone. It was his professional opinion that there was sufficient mining potential to warrant the construction of a water race to service this region²⁸. There were many local miners willing to work this ground, but they were restricted by the lack of regular water supply. Much of their equipment was lying idle on old abandoned workings, ready to be transferred to new workings.

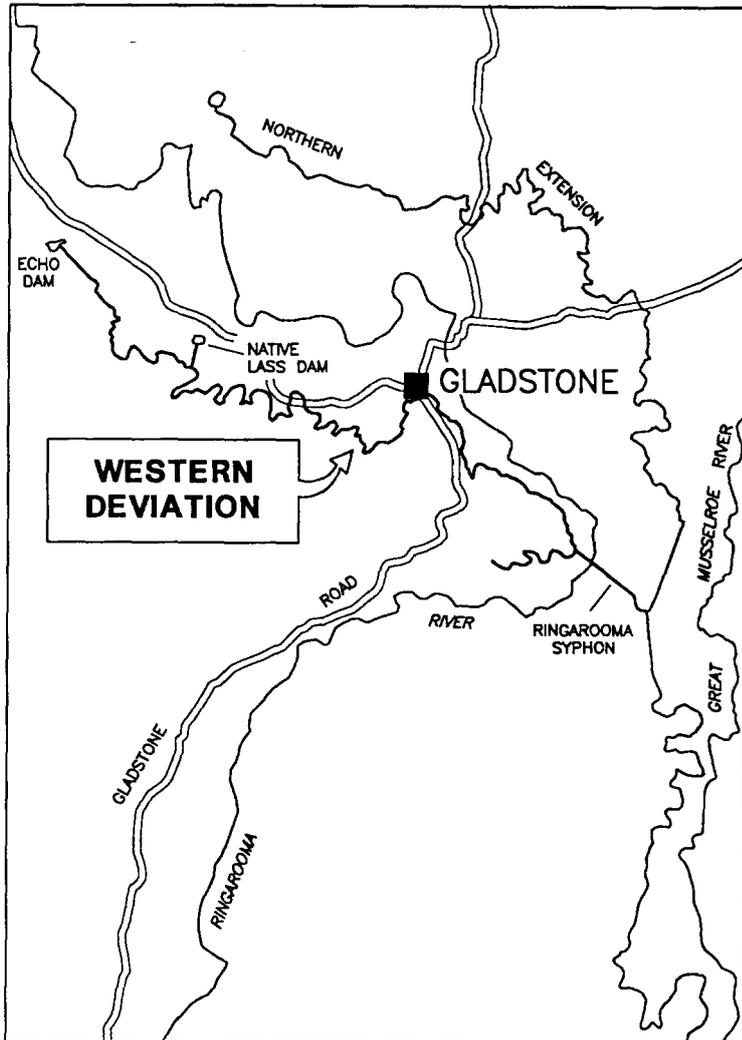
As a result of the report, a survey was carried out by Donald Fraser to determine the most suitable line and cost of construction. The new race was to be known as the Western Deviation²⁹.

The 6 mile long race was to commence at the No. 4 Syphon outlet and continue across the Ringarooma River by means of a one mile long syphon and head in a northwesterly direction towards Gladstone. The race was then expected to proceed through the township and to a point beyond Mt Cameron Creek, approximately 1½ miles to the west. When completed, the race was expected to carry 35 sluiceheads of water.

Part of the proposed race included a short branch to service the already successful Purdue tin workings. Commencing at the outlet of the Ringarooma Syphon, the Purdue Race was surveyed along the southern slopes of Second Sugarloaf to the mine.

To save on construction costs, it was suggested that the Ringarooma Syphon be built out of pipes from the rarely used Scotia and Edina Syphons. Surveys of all construction work were to be carried out by District Surveyor George Campbell-Smith of St Helens³⁰.

On 5 August 1921, the Parliamentary Standing Committee on Public Works approved of the dismantling of the Scotia (No. 6) Syphon as well as the two syphons (No. 4 and No. 5) at Edina Sugarloaf. This decision effectively closed down the entire Northern Extension. The Committee also recommended that the sum of £7,700 to be spent on the construction of the Western Deviation³¹.



halted until January 1923, when contractor S. Taggart completed the timber lining of the race tunnel at a cost of £10.

The Ringarooma Syphon, which had been completed by September, was allowing 25 sluiceheads of water to flow through to Mount Cameron Creek. With the completion of the syphon across Mount Cameron Creek during late February, the Western Deviation had become a reality³⁴.

The final cost of constructing the new race was £9,200, which was £1,500 above the original estimate. Part of the extra cost was attributed to the purchase of extra steel bands to strengthen the wooden pipe section of the Ringarooma Syphon. £200 was paid to contractors G. Watt and H. Frost, who commenced cutting the 1.4 mile long Purdue Branch early in June 1923. This project was completed by the end of July, only eight weeks later³⁵.

As early as 1925, an extension of the Western Deviation was mooted by local miners. Attempts to open up new tin leases in the Native Lass Plain area were being hampered by the lack of a permanent water supply. However the recommendations of a special Mt Cameron Water Race Board meeting on August 13 failed to convince the Minister for Mines. It was recommended to extend the race 4½ miles to the then disused Native Lass Dam, at an estimated cost of £800³⁶. This project was to be deferred for three years.

Apart from widening the Purdue Branch during September 1925, no other earthworks were carried out before the Board was abolished in November 1926³⁷.

Meanwhile, a report had been submitted to the Government by State Mining Engineer James Balfour Scott. He stated that during August 1926, little payable ground existed in the vicinity of the Gladstone township. Therefore, to maintain long-term employment in the district, new ground needed to be opened up beyond Mt Cameron Creek. Scott subsequently surveyed a line of race, commencing at the terminus of the existing deviation linking the old races connecting Native Lass and Echo Dams³⁸. This survey, together with a cost estimate, was prepared during 1927. A further delay ensued, as it was decided to postpone the project for at least another twelve months³⁹.

Construction of the new extension by contractor Robert Long was finally underway during November 1928. Long completed the task as far as the refurbished Native Lass Dam early the following year. It was not until December 1930 that the final two miles to Echo Dam were completed.

The Floyd brothers, who had tin leases in the area, carried out construction work for 3/- per chain, while under the supervision of the Race Manager. Repairs were also made to the damaged wall of Echo Dam, the dam being needed to store night water⁴⁰.

Echo Dam had therefore become the terminus of the 12½ mile long Western Deviation, which had finally taken almost eight years and cost over £10,000 to build. A further expense of £1000 was incurred when severe damage to the Ringarooma Syphon was caused by the April floods of 1929⁴¹.

The Deviation was completely maintained until the end of 1934, when demand for water beyond Mt Cameron Creek had virtually stopped⁴². During the years that followed, the race

During March of 1922, work commenced removing the earth covering the 47 chain long Scotia Syphon. The 30 inch diameter wood-stave pipes were then carefully inspected before being retained for the eastern section of the Ringarooma Syphon. The steel bands were retained for the same purpose. The two steel syphons, No. 4 and No. 5, were also dismantled, and the pipes cleaned and redipped in tar.

To obtain a greater head of water, No. 4 Syphon was relaid in the original position and lengthened by 9 chains with reconditioned pipes from the old Edina (No. 5) Syphon. Commencing from the Syphon outlet, a new race 20 chains long was then cut along the western side of Edina Sugarloaf to connect with the intake of the Ringarooma Syphon. The task of grading and timber clearing for the mile-long syphon was carried out during April. At the same time, the construction of the first timber trestles to carry the syphon across the Ringarooma River commenced³².

It was during April that approval was granted by the Ringarooma Council to allow a race tunnel to be constructed under Gladstone Road at the southern boundary of the Gladstone township. The tunnel was dug some six months later by A. Packett. Construction continued steadily until June, when it reached John Shields slaughter yard just southeast of Gladstone. To allow the race to continue through his property, Shields was later compensated by the Board to the sum of £7/15/-³³. At this stage channel cutting had been completed back to the Ringarooma Syphon outlet.

During December, the task of erecting the steel pipes and wooden trestles for the Cybele Creek and Fly by Night Creek syphons had been completed. Progress beyond Gladstone was

beyond Gladstone gradually deteriorated into a state of disrepair. Its continued existence was based on the supply of domestic water to the Gladstone township.

By the end of 1936, the syphons across Mt Cameron and Fly by Night Creeks had become derelict. The Cybele Syphon was still maintained, together with the Ringarooma Syphon⁴³. However the latter was causing some concern, as the steel section was leaking badly and required constant maintenance. The ageing pipes were subsequently replaced in 1940 with a 1280 feet long, 15 inch diameter reinforced concrete column⁴⁴.

Although showing signs of decay, the wooden section was still giving adequate service. Major repairs were carried out on the race tunnel at Gladstone during 1942, replacing the rotten timber lining⁴⁵.

During the winter of 1946, a collapsed trestle caused a serious break in the Ringarooma Syphon. Although the damaged trestling was repaired and water supplies restored, the general condition of the Ringarooma Syphon was a cause of great concern to the Board⁴⁶. It was not surprising that the demise finally occurred just three years later, when in 1949, a major collapse to the original wooden trestling caused a break in the concrete pipe column⁴⁷.

The Western Deviation was officially abandoned. The 15 inch diameter steel Cybele Creek Syphon, which had been replaced only two years earlier (1947), was immediately dismantled with the best pipes used to repair the Amber Creek Syphon, while the one mile long syphon was not removed until 1953. It was many years later (early 1970s) that the Gladstone Road tunnel was finally filled in.

To trace the deviation today, more than 40 years later, can be a difficult assignment. Much of the earth channel has disappeared under plough, while the remainder is choked with silt or bracken fern. Little remains of the syphons, apart from the odd rusty pipe lying at the bottom of some forgotten gullies. Although the Western Deviation served the Gladstone area for nearly 27 years, only a few local residents today refer to it as a "distant memory".

50 YEARS ACHIEVED — THE CONSOLIDATION CONTINUES

The dismantling of the Northern Extension in favour of the Western Deviation proved to be a short-sighted exercise. After lying abandoned for only five years, the Northern Extension was patiently awaiting a new lease of life.

There had been a gradual depletion of tin reserves around Gladstone during this period. A closer investigation of previously-worked areas was undertaken, as well as of new ground along the race. The results of this investigation confirmed an urgent need to restore this unused section.

The replacement of the Edina Syphon was undertaken during 1927 at a cost of £2518. The successful tender came from the Hume Pipe Company, which supplied 18 inch diameter concrete pipes. This was the first syphon on the race to use concrete pipes. This time however, the total length of pipe column was 4122 feet, some nine feet shorter than its predecessor⁴⁸. At this stage, the reconstruction of the Scotia Syphon was not considered, as water was only required as far as the Garfield Mine.

During 1932, the Mt Cameron Water Race celebrated its first 50 years of operation. This landmark signalled a period of consolidation along the Northern Extension. The storage capabilities of the Edina and Cybele Dams were enlarged in

1934, followed by the replacement of the Scotia Syphon the following year⁴⁹.

After persevering for a few years with its own water storage, the Lochaber Mine needed a high-level storage to work its ground. The restoration of the Scotia Syphon provided the best solution.

Early in 1935, the Board approved of the construction of a 15 inch diameter, 16-gauge galvanised steel pipe column at a cost of £660. The total length was increased to approximately 2940 feet or 44½ chains⁵⁰.

The construction of the new syphon resulted in the reopening of the No. 1 Government Dam, along with the Doone and Scotia Branches. The mid 1930s saw the re-emergence of the Amber Branch. To meet the demands for water by the reopened Amber Hill leases, the 3 ft wide channelling was scrubbed and cleaned. After a lapse of 35 years (1902–37), Amber Creek once again had a syphon. The second Amber Syphon was a 15 inch galvanised steel pipe column laid on the valley floor, similar to the new Scotia Syphon.

It appeared that 1936 was the year that the Northern Extension had regained its former glory, while the Western Deviation was experiencing a rapid decline. In 1938 a new low-level race from the Scotia Syphon inlet to the No. 1 Government Dam was completed⁵¹.

The iron fluming across Old Chum Creek was finally replaced by a wooden structure during 1939. After 34 years of faithful service, the sole survivor of the original race fluming had succumbed to the ravages of nature⁵².

It was claimed that the 30 year old wooden Musselroe Syphon was reconstructed during 1940–41. Instead of using Scandinavian timber as in the past, the wood-staves were constructed of pine from South Australia. The original diameter of 20 inches was maintained⁵³.

During 1942, the Board overhauled the steel Amber Syphon. The pipes were dismantled for cleaning and tarring before being reassembled on the same site⁵⁴. All other main race syphons were in a satisfactory condition, except for Moores (No. 4) Syphon which had developed serious bottom corrosion. This was replaced with a 27 inch diameter flexible concrete column during early 1946, at a cost of £2880. The old steel pipes had surprisingly survived for almost 38 years⁵⁵.

Built in 1889, the old wood-concrete weir across the Great Musselroe River received a much needed facelift during 1947. The original dam wall was completely moulded in concrete and raised six inches⁵⁶.

The imminent collapse of the Ringarooma Syphon during 1948 initiated the duplication of the Edina Syphon. The original concrete pipe column had maintained excellent service since 1927. It was the Board's intention to use the increased capacity of the Edina Syphon to service Gladstone's domestic water supply, as well as the mining industry.

The year 1949 brought the anticipated demise of the Ringarooma Syphon and the dismantling of the abandoned Cybele Syphon. Gladstone had lost its domestic water supply. The ailing Amber Syphon was immediately repaired from the best of Cybele's 15 inch diameter pipes. The whole length of the Amber Branch was also cleaned out⁵⁷.

The Doone Branch had seen little activity since George Mallinson's Doone Mine was abandoned in 1941. The race was scrubbed and cleaned in 1953 when the old workings were reopened by Bert Dunn. However, after only two years of service, the Doone Branch was abandoned once again.

1955 saw the restoration of Gladstone's water supply to the Mount Cameron Water Race across Bells Bridge⁵⁸.

The Amber Creek and Scotia Syphons were dismantled in 1956 to provide pipes for the recently established Elizabeth Tin Syndicate⁵⁹. The removal of the Scotia Syphon had effectively closed the Scotia and Doone Races for the last time, while the high level race to the No. 1 Dam had been superseded by a lower level race in 1938.

The Amber Branch was also closed, only to gain a reprieve some years later.

After 75 years, the only surviving part of the Mt Cameron Water Race was the main race from the Great Musselroe intake to the No. 1 Government Reservoir. Coincidentally, this was the same position when the official opening took place in 1890. The fortunes of the Race had turned a full circle.

THE LAST 35 YEARS — FROM FAILURE TO A FUTURE

In 1957 the wooden Musselroe Syphon was suffering from neglect. The trestle supports had to be replaced and the nearby channelling cleaned of weed growth⁶⁰.

Since the early 1920s there had been only three cottages to maintain, those being the Manager's residence, Edina and Chum Cottages. [Cascade Cottage was razed in a bushfire during April 1921, while Scotia Cottage was sold and transported to the Monarch Mine in 1924]⁶¹. The Manager's house at Gladstone had been maintained, while the Channel Keepers' cottages had been badly neglected.

It was no surprise when Chum Cottage was vacated in July 1956 and Edina Cottage in October 1958. Both residences had become uninhabitable. At this stage, the race was virtually operating for three main mining operations. They were Star Hill, Elizabeth Tin Syndicate and Musselroe mines. The race was also supplying Gladstone with domestic water⁶².

Early 1964 saw the replacement of the Old Chum Flume for the fourth time. The Dorset Dredge commenced operations at McGregor-Black Duck area during April, and became a race customer⁶³.

During 1968, a section of the race south of the Old Chum Flume was widened to provide night water storage for the Musselroe Mine. Later that year a start was made on the construction of a dam on Old Chum Creek. This was built by the Avoca Transport Company at a cost of \$4,900⁶⁴, and was completed in May of the following year. Chum Dam was estimated to supply 30 sluiceways of water per week throughout the year.

Towards the end of 1969 work had commenced on a new syphon across Amber Creek. Water was required to service the Amber Hill Mine and another producer along the Amber Branch⁶⁵. The syphon was completed, together with a 'clean-out' of the race, early in 1970.

Meanwhile, the Musselroe Syphon was requiring constant maintenance — a replacement was anticipated by the Board within a couple of years. However during 1970 the newly constructed Chum Dam was seriously damaged by floods, which necessitated \$4,500 being spent on repairs⁶⁶.

The early 1970s proved to be a difficult period for the Mt Cameron Race, where the number of consumers had dwindled down to three. The Dorset Dredge ceased operations during March 1971, reducing the number to two⁶⁷. It was recorded in 1973 that only the Star Hill Mine and the Gladstone township required water. During this period, the race had gradually

deteriorated to a stage where only essential maintenance was carried out. The derelict Edina Cottage was demolished. The wooden Musselroe Syphon had become a liability, where constant attention was needed to keep it operational. Twin aluminium pipes were installed at the intake of the Edina Syphon during 1975, which had improved the flow of water. The Musselroe Mine was again using race water⁶⁸.

The long awaited replacement of the decrepit Musselroe Syphon was undertaken in 1977 at a cost of \$2,900. It was changed from a wooden to a concrete pipe column, to conform with the other two syphons⁶⁹.

After enduring years of neglect, the race was once again thoroughly cleaned of weed growth with the use of chemical spraying during 1978.

The brief period of 1981-82 saw the demand for water significantly increased to five customers. After many years of struggle, the future of the Mt Cameron Race seemed assured. That optimism soon disappeared, when the following twelve months saw the number of customers reduced to only two⁷⁰.

The closure of Ron Lawry's Star Hill Mine towards the end of 1983 was a major setback for the Board. For over 40 years this mine had been a major tin producer, as well as a prolific user of race water.

The total collapse of the local tin industry eventually occurred early 1984, with the closure of Vern Wood's Musselroe Mine. The Race was then no longer required for mining purposes for the first time in its long history⁷¹.

To maintain an efficient domestic water supply for Gladstone, the main channelling was cleaned out and the town water column was dug up, cleaned and replaced. November 1984 saw the Board's recommendation to close down the race and dispose of its assets. The Manager, Mr Neville Petrie officially ceased duty. He was to return voluntarily early 1986 to carry out urgent race repairs for the Gladstone water supply.

After 98 years, the final meeting of the Mt Cameron Water Race Board was held on 5 December 1985 with the intention of dismantling the race and disposing of its assets.

Fortunately, these were successfully tendered for by Mr Bert Farquhar, a pastoralist from Scottsdale, during 1986. The ensuing three years saw the complete rehabilitation of the race from the Great Musselroe River through to the Government Dam, as well as extending the race on to Farquhar's property at Rushy Lagoon. Farquhar also increased the capacity of the Old Chum Reservoir by raising the height of the dam wall.

To maintain the viability of the race, the Mt Cameron Water Race Board was reconstituted. The first meeting was held at Scottsdale on Tuesday, 1 December 1987.

Now 108 years old, the Mt Cameron Water Race had progressed from failure to hopefully a permanent future.

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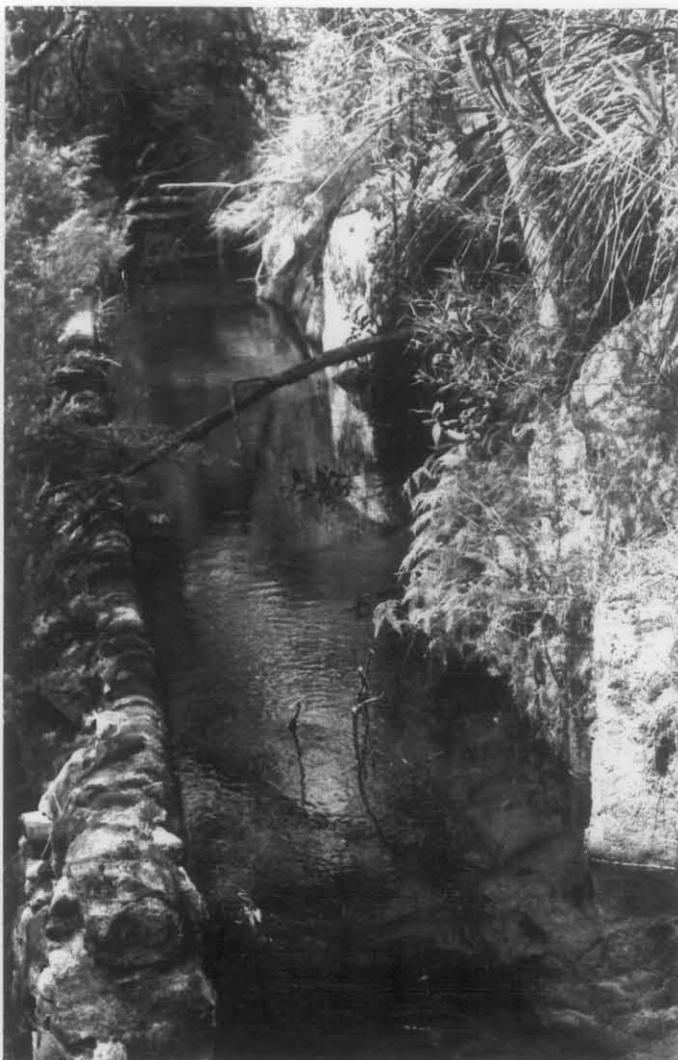
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[12 June 1990]



Great Musselroe Intake Dam, rebuilt 1947 (original dam built 1889).



Main race at the Great Musselroe Intake, built 1889.



*Musselroe Creek Syphon, built 1977
(Original steel syphon built 1889).*



Ringarooma Syphon, 1922-1949 (above).



Edina Syphon, built 1927, duplicated 1948 (original steel syphon built 1889) (right).



Moore's (No. 4) Syphon, built 1946 (original steel syphon built 1889).



Chum Cottage, 1890-1988.



Old Chum Creek Intake, built 1905.



Main Race, built 1881.



The Big Cut, built 1987.



*Old Chum Creek Flume, built 1964 (original wooden fluming built 1881, called the "Iron Fluming", 1905-1939).
Photo: "The Mercury"*

THE MOUNT CAMERON WATER RACE

HISTORY

The Race was partially constructed during 1881–82 by the Mount Cameron Hydraulic Tin Mining Company for a distance of 20 kilometres. It was purchased from the Company by the Tasmanian Government in 1887 at a cost of \$9500 and extended a further 33 kilometres. Commencing at the intake on the Great Musselroe River, the main channel meandered 53 km to a reservoir near Aberfoyle Hill, northwest of Gladstone.

The Race was officially opened by Sam Hawkes MHA on 21 August 1890.

From 1881 to 1984 the Race provided a permanent water supply to numerous tin mines in the Gladstone area. During this time an extensive network of branches was built to develop new tin deposits on both sides of the Ringarooma River. The largest branch race was the 20 km long Western Deviation, which was constructed across the Ringarooma River to service tin deposits west of Gladstone.

Since World War II, the gradual decline in mining eventually closed all branch races, leaving only the 53 km long Main Race which remains today.

In 1986, Mr Bert Farquhar of "Rushy Lagoon" began using the race to provide a permanent water supply for his property. Since then, the race has been rehabilitated and extended.

Today the length of the enlarged Mount Cameron Water Race is 128 kilometres.

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