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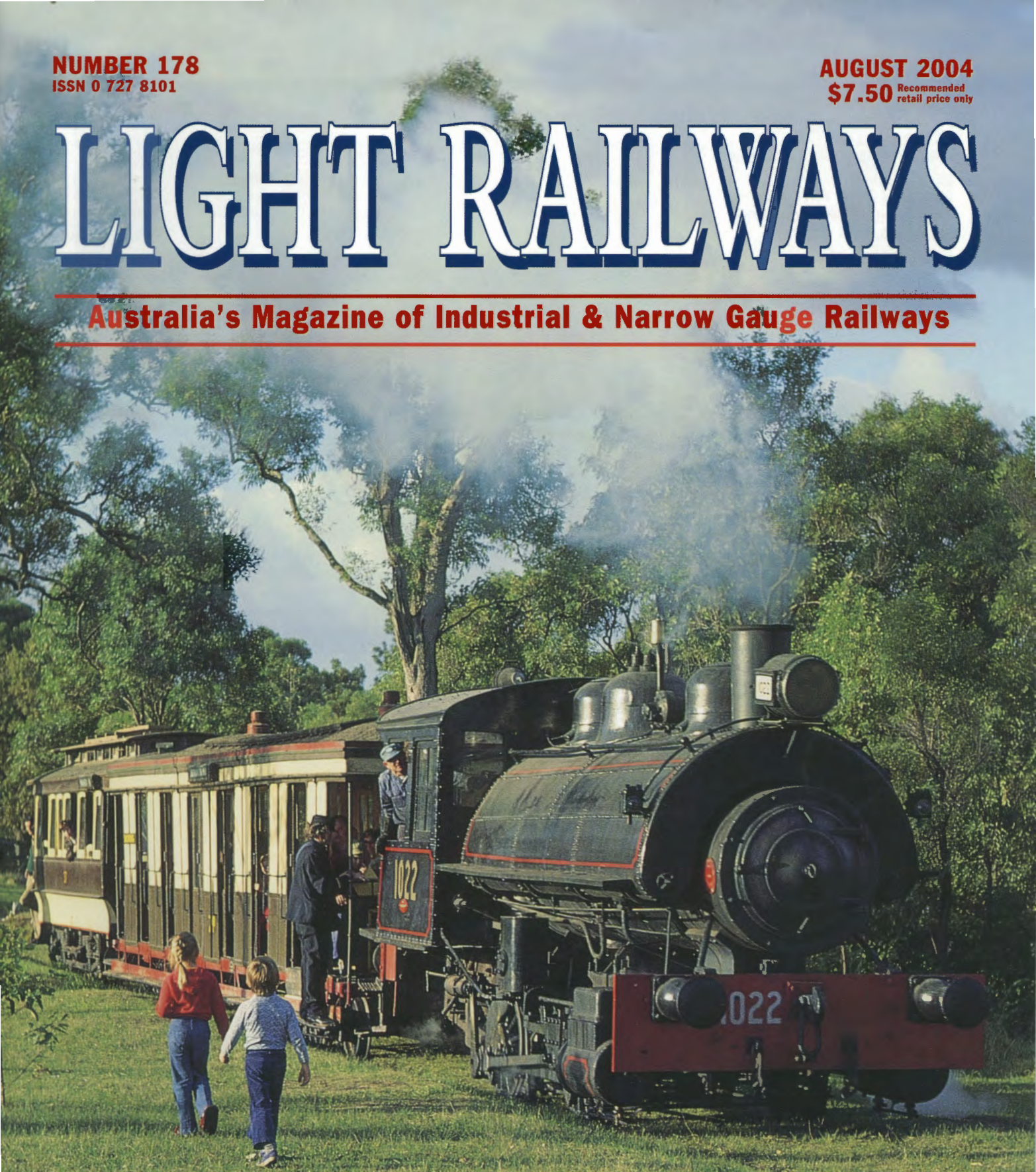
LIGHT RAILWAYS

Australia's Magazine of Industrial & Narrow Gauge Railways



Light Railway Research Society of Australia Inc.

LIGHT RAILWAYS
Australia's Magazine of Industrial and Narrow Gauge Railways

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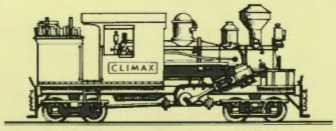

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Conversions:

1 inch (in)	25.40 millimetres
1 foot (ft)	0.30 metre
1 yard (yd)	0.91 metre
1 chain	20.11 metres
1 mile	1.60 kilometres
1 super foot	0.00236 cubic metre
1 ton	1.01 tonnes
1 pound (lb)	0.454 kilogram
1 acre	0.4 hectare
1 horsepower (hp)	746 Watts
1 gallon	4.536 litres
1 cubic yard	0.765 cubic metres

Contents

Comment

There's a decades-old question that we often ponder here at LR. No, it's not "What is the meaning of life?" or "Why are we here?"; this inscrutable question is "What, exactly, is a *Light Railway*?".

As the final arbiters of what may or may not appear in our pages, we three editors can experience some difficulty knowing just where to draw the line. And, of course, since we're dealing with a subject that has more grey areas than a gallery full of Darius Kinsey prints, our decisions are not always unanimous.

Historically, locomotives, rolling stock and even entire railways have moved to or from 'our territory', and it's my feeling that if something ever was within our sphere, then it continues to be of some interest and is, therefore, worthy of mention. Just what form that 'mention' should take can be a little more controversial.

Recently, a long standing NSW member asked me why news of the reopening of part of the Dorrigo line could not be reported in LR. After all, it was a light 'pioneer' branch that performed much the same function as the VR's 2ft 6in gauge Beech Forest line. The answer, of course, is that the NSWGR had the good sense to build the line to standard gauge (though narrow gauge had been mooted). On reflection though, after he left, I couldn't help feeling that he did have a point. *Bruce Belbin*

The Light Railway Research Society of Australia Inc. was formed in 1961 and caters for those interested in all facets of industrial, private, tourist and narrow gauge railways in this country and its offshore territories, past and present.

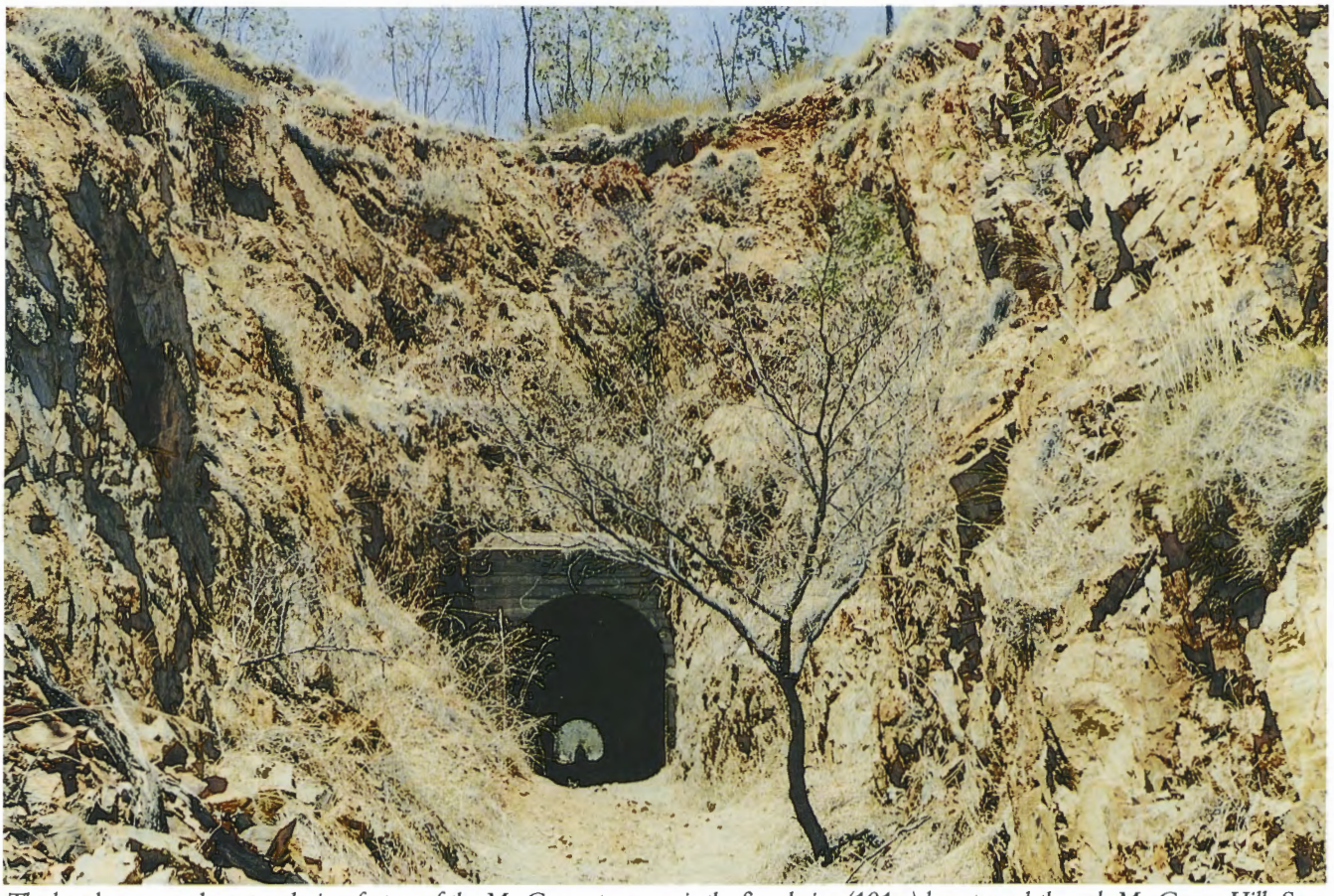
Members are actively involved in researching light railways in libraries and archives, interviewing knowledgeable first-hand participants and undertaking field work at industrial sites and in the forests.

Light Railways is the official publication of the Society. Material submitted is subject to editing, and publication is at the discretion of the Editor.

Articles, letters and photographs of historical and current interest are welcome. Contributions should be double spaced if typed or written. Electronic formats accepted in the common standards.

Material is accepted for publication in *Light Railways* on the provision that the Society has the right to reprint, with acknowledgement, any material published in *Light Railways*, or include this material in other Society publications.

Front Cover: *Originally imported by the NSW Public Works Department, as their number 57, Vulcan 0-4-0ST 2505 of 1916 soon passed into the ownership of the NSW Government Railways, becoming V1217. In the 1924 renumbering it became 1022 and, apart from military service during World War Two (when it worked at the US Army Quartermaster's store near Sandown), Vulcan 2505 remained with the NSWGR until its retirement, in June 1970. Initially preserved by the NSW Rail Transport Museum, it moved in late 1971 to the Steam Tram & Railway Preservation Society's railway in Parramatta Park, in exchange for a similar machine (Vulcan 2289 of 1912, ex-Emu & Prospect Gravel Company No.1). In August 1978, it was in action hauling former government tramcars 74B and 37C, both of which had spent many years on the North Coast Steam Navigation Company's Byron Bay Jetty tramway before coming to Parramatta Park. Photo: Bruce Belbin*
Back Cover: *On Sunday 26 October 2003, South Johnstone sugar mill's EM Baldwin B-B DH 32* LIVERPOOL *(B/N 10385.1 8.82 of 1982) has 54 empty 6-tonne bins plus brake wagon 4 in tow as it traverses a well signposted level crossing on the South Johnstone-Japoon main line near Little Tableland. Photo: Scott Jesser*



The best known, and most enduring, feature of the MacGregor tramway is the five chains (101m) long tunnel through MacGregor Hill. Seen here from the mine side, on 22 October 2002, it remains in good order and is featured on the region's heritage trails. Photo: Brian Webber

From Ballara to Hightville: A Remote 2ft Gauge Solution

by John Kerr

Break of gauge has been the curse of the Australian government railway systems but there are times when it makes sense. Such was the case for the Hampden-Cloncurry Copper Company Limited when it discovered that the cost of building in 3ft 6in gauge all the way to Wee MacGregor mines was excessive. It was better to incur the cost of transhipping and adopt 2ft gauge for the last few miles to reduce capital expenditure. Transhipping was not expensive for a bulk product like ore, especially when gravitation could be made to do the work.

The Hampden Company had gambled on the Wee MacGregor mines - located halfway between Cloncurry and Mount Isa - being far richer than its proven reserves. It had bought them in a competitive market to increase the flow of ore to its central smelters at what was known successively as Hampden, Friezland and finally Kuridala.

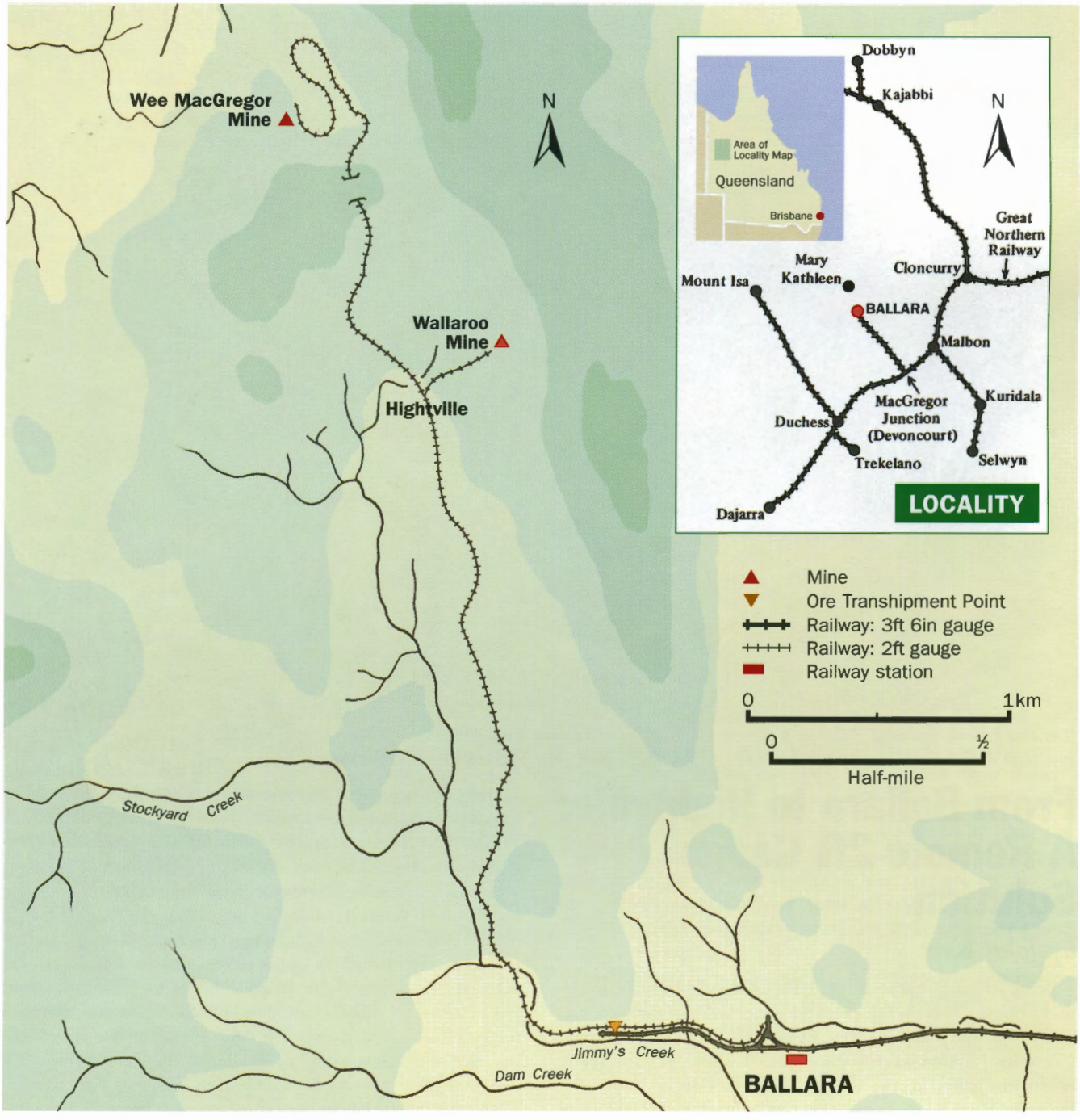
Copper had been discovered by the grazier, Ernest Henry, on the Cloncurry gold field in 1867. Relying on horse and bullock team haulage to the shallow gulf port of Normanton, copper mining proved uneconomic. Scottish investors lost heavily in the Great Australia mine just south of today's Cloncurry. Plans for a private railway connection to Normanton at the turn of the 20th century were undermined in 1900 when William Kidston (later Premier) reported that a member of parliament had been offered a bribe to help secure passage of the necessary Bill.[1]

Hampden was at that time regarded as the premier show on the field, but prospecting continued, discovering major deposits at Selwyn and Mount Cuthbert.[2] Mining was confined to the richest ores, hauled by team either to Normanton or Winton, a railhead linked to Townsville with the completion of the Hughenden-Winton extension on 5 July 1899. Building a branch line west from Hughenden through grazing country to Richmond, opened on 1 June 1904, shortened the distance for them. It foreshadowed the decision to link the Cloncurry field with Townsville rather than the Gulf of Carpentaria. The rails reached Julia Creek in early 1907 and Cloncurry by Christmas, the pace of progress accelerated by laying track across dry creek beds until there was time to build bridges. This gave a dry weather connection a year before the official opening dates, 29 February 1908 to Julia Creek and 13 December 1908 to Cloncurry.

Railway construction and rising copper prices stimulated mining investment. The Hampden-Cloncurry Copper Mines, Limited was floated in Melbourne, and registered to operate in Queensland on 17 October 1906.[3]

Fifty-four rail miles separated Cloncurry and the Hampden mines to the south. The Hampden Company joined with the Mount Elliott Company, whose deposits lay 18 miles further south, to provide half the cost of construction in order to secure a railway, the government insisting that it be publicly owned. The line opened to Hampden on 11 June 1910, the township known as Friezland until anti-German feeling in World War I had it renamed Kuridala. The extension to Selwyn, adjoining the Mount Elliott mines, opened on 15 December 1910.

James Reid Peberdy was the son of Thomas Peberdy and Margaret Johnstone Reid. Margaret's niece, Margaret Linedale, married John Moffat, famous as the mining entrepreneur who controlled the Cairns hinterland mining field from his Irvinebank headquarters. Moffat was pivotal in developing the Chillagoe



mines west of Cairns and was also a director of Mount Elliot Limited. Peberdy's mother-in-law, Isabella Buchan Reid, was elder sister of John Holmes Reid with whom Moffat had been associated since his early ventures into mining in the 1870s. Margaret Linedale's younger brothers included Anthony Theodore Linedale, Moffat's business partner and also a Mount Elliott director, and John Cowper Linedale, the senior warden who later reported for the government on the prospects of the MacGregor mines. The Linedale, Reid and Moffat families all came from the Newmilns area in the Parish of Loudoun in Ayrshire, Scotland. These relationship were not sufficient to ensure that the southern part of the Cloncurry field was efficiently exploited by a single enterprise rather than the competing Hampden and Mount Elliott interests.

The Hampden, Mount Elliott and Mount Cuthbert companies competed to buy up mines with promising deposits. Hampden secured the MacGregor, Duchess and Trekelano mines south of Cloncurry in 1906. As it had already built its smelters beside the Hampden mine, a further rail link was essential.

The Great Western Railway Act (1910) proved a bonus. It authorised construction of a trunk railway from Tobermory in south-west Queensland to Camooweal on the Northern Territory border, along the route of the projected Bourke to Darwin railway. The scheme included four connecting lines, from Charleville, Blackall, Winton and Cloncurry, which were, respectively, the starting points of Sections A, B, C and D of the scheme. Construction for Section D began from Malbon on the Cloncurry-Kuridala line. Work started in 1911 and the first section opened to Duchess on 21 October 1912. This enabled ore from the rich Duchess mine to be railed direct to the smelters. The line was extended to Butru in December 1915 and Dajarra in April 1917.

To exploit the Trekelano mine, acquired by 1912, the Hampden company had to provide its own private feeder railway. The line from Juenburra, south-west of Duchess, to Trekelano, 8 miles over easy country, was completed in November 1917 after development work demonstrated the deposit warranted the expenditure.

The MacGregor mines

In 1906 the MacGregor group of mines were floated in London as the MacGregor Cloncurry Copper Mines Limited. The British company erected steam winding plants at the MacGregor and Wallaroo mines in 1907, development being supervised by its general manager, JR Peberdy.[4]

MacGregor Cloncurry Copper Mines Limited was already talking of a rail link from Malbon in 1908 when the experienced mining engineer, EA Weinberg, General Manager of the Chillagoe Company, made an inspection tour of Cloncurry. He called a railway premature as the field first needed to be developed to demonstrate its worth.[5]

The MacGregor Company commissioned the elderly surveyor, Monks, to examine a railway route to their mines and make an exploration survey. As part of their negotiations with the government for a rail connection, Thynne and Macartney, solicitors for the company, provided his plans to the Railway Department, but in February 1911 they asked for a copy '*as we are delayed in fixing the terminal points for the aerial tramway which we contemplate erecting as soon as possible*'.[6] It would seem that Monks found the country too rugged for an economical rail link to the mine, and had suggested an aerial tramway between the mine and the proposed railway terminus.

By this time RD Frew was preparing parliamentary plans of the first section of the Great Western Railway south west from Malbon, and the relevant section was sent to the company in May 1911. This ran nearly parallel to the route to MacGregor for five miles. As a result the eventual detailed survey to the mine began from MacGregor Junction, later known as Devoncourt, nine miles from Malbon towards Duchess.

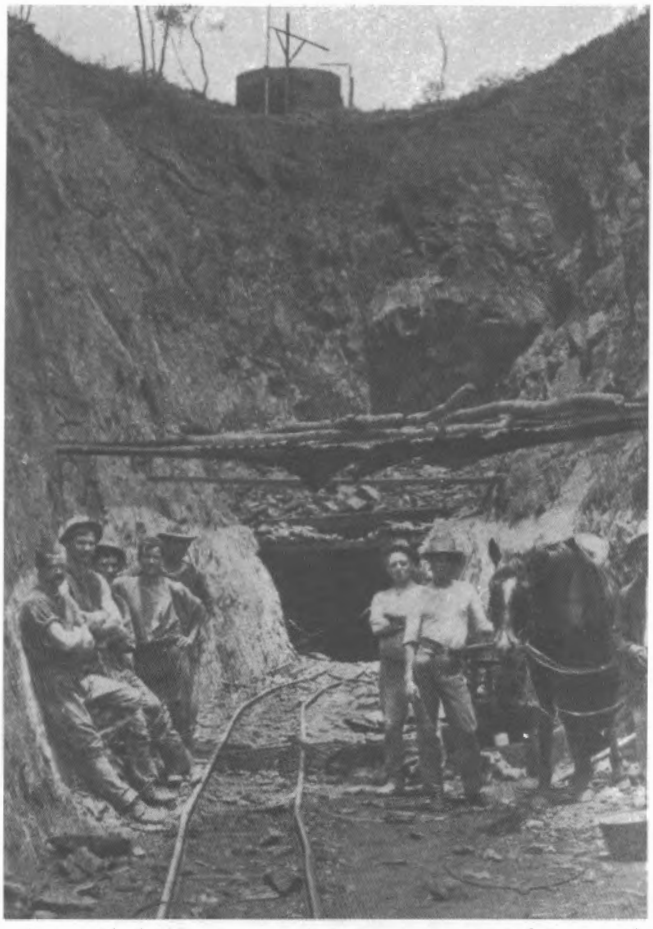
The MacGregor company was keen to persuade the government to build the railway to the mines as this would enable the company to concentrate its capital on developing the mine itself. Peberdy reported enthusiastically on the company's mines in June 1911 and predicted large tonnages of ore. Although government policy favoured public ownership of railways, the newly-appointed Commissioner for Railways, Charles Evans, decided first to ask the Mines Department about the prospects of the MacGregor Mines.

John Cowper Linedale, an experienced mining warden was sent from Charters Towers to examine the mine. He reported that the mines *'should, if actively worked, yield from 1000 to 1200 tons a week of a grade which it would pay to rail to the metallurgical works ... traffic for the first 2 or 3 years would more than pay maintenance'*. He added, ominously, that '*when the present ore reserves ... become exhausted, it is somewhat speculative to say that they would continue to yield ore in sufficient quantities to keep a railway running*'. EJ Laun, Assistant Mines Inspector at Cloncurry in a report dated 22 July pointed out that profitable ore cut out at the 320 foot level and concluded that '*the amount [of ore] now developed is all that may be expected to be won from this mine*.' The Wallaroo mine he found well equipped, adding, however, '*I doubt that a length of 500 feet of profitable ore can be proved*.' Of the other mines in the group, the Wattle had two small shafts and poor prospects while the Central, south of the MacGregor, was disappointing although there was a probability of a large body of ore yet to be found. There were a lot of other small mines but these did not change his overall assessment.[7]

Evans commented that '*on the face of Mr Linedale's report it is exceedingly doubtful if the construction of the railway by the Government is justified*'. He suggested that the company build a 2ft gauge tramway like Stannary Hills, and construct it themselves.[8] This was estimated to cost £71,000. Chief Engineer, NG Bell, estimated that a 3ft 6in gauge 8-ton axle load line suitable for B15 class engines would cost £92,000.

JA Thomas, the Cloncurry Inspector of Mines, made a more detailed inspection in October 1911. He concluded that the MacGregor Mine would be the biggest producer with numerous payable chutes of ore which '*from careful and systematic measurements and sampling are estimated to contain over 100,000 tons of payable ore*'. The Wallaroo had 12 to 15 thousand tons of 10 per cent ore available and he concluded. The State Mining Engineer, CFV Jackson provided the definitive report to the Premier in December, concluding that the reserves were

Building the MacGregor tramline, showing the terrain that encouraged the company to choose 2ft gauge.
From Queensland Government Mining Journal, *March 1916, p.211*



The roughly laid tramway used during construction of the tunnel. From Queensland Government Mining Journal, *March 1916, p.122*

sufficient to '*ensure a large amount of traffic over a railway during the first years of running*'. He suggested building in 3ft 6in gauge to the edge of the rough country linked by a short tramway from McGregor Mine like that proposed for Esmond [near the 15 mile] as it would save much expenditure.[9] This was the course finally adopted although I find no evidence that any tramway was ever built at the 15-mile serving what became known as the Pindora group of mines.

The company was still negotiating for a railway and considering whether to erect smelters near its mines when it was acquired in 1912 by the Hampden Cloncurry Copper Mines Limited.[10] The Hampden Company would have done well to have consulted Commissioner Evans or the Mines Department before completing its purchase.

Negotiations over railway construction continued and eventually, in an innovative partnership with government, it was agreed that the Hampden-Cloncurry company build the line using rails and sleepers rented from the government. This took the pressure off the government to build the line itself while reducing the capital expenditure by the company. When the company failed, the Railways Commissioner was able to repossess the rails and eventually reuse them elsewhere without the delay and odium associated with closing a government railway.[11]

The Railway Department allowed one of its engineers, PH Ainscow, to be seconded to the Hampden Company as resident engineer in charge of construction. Work began while the plans were being finalised. Ainscow wrote on 30 August 1913 that '*it is probable another scheme will be submitted to join the Mines by a light tramway with the railway at the 22 ½ miles peg.*'[12] It was 24 September 1913 before he could report the survey complete to the mines, although the terminus had not been fixed. It was soon decided to terminate the 3ft 6in gauge at the 22 mile 52 chain peg because the country between there and the mines was exceedingly rough with the cost of sidings to Wallaroo, Wattle and MacGregor mines estimated to be £11,005.[13]

The terminal station was at 22 ½ miles where there was level ground known as the 'Lady Flat' with room for a station yard and township.

The Hampden company soon encountered problems with its MacGregor investment. During 1913 a fire destroyed the poppet head above the MacGregor mine shaft and a large amount of firewood. The company responded by sinking a new shaft but a heavy creep set in after the new shaft reached 106 feet and the old shaft had to be repaired to ensure the mine would be able to ship ore when the railway was completed.[14]

Thomas Warrick, local manager for the Hampden company, told the Education Department in February 1914 that 40 men were then employed at the main mine and 12 at the Lady leases as part of its £200,000 project to develop their properties. He expected to employ 100 men once the railway (and tramway) was completed.[15] The department was deciding whether to establish a school at Hightville, the township adjoining the MacGregor mine.

The 2ft gauge tramway

Later that month, Ainscow forwarded a blue print of the 2ft gauge tramway which he stated the company was building from the terminus of Wee MacGregor Tramway [3ft 6in gauge] to the MacGregor Mine and also to join up the town of Hightville. He added that the tramway was being built with 28 pound rails and steel sleepers. '*A special engine and trucks will work it.*' The 3ft 6in gauge line was nearing completion and as the gangs finished work on it, they would be transferred to the corresponding work on the 2ft gauge tramway.[16]

Bell, as Chief Engineer of the Railway Department, advised the secretary's office that as government rolling stock would not run on the 2ft tramway nor was the department supplying the rails for the tramway, the department had nothing to do with it and any criticism of the plans would be out of place. He therefore returned the plans to the secretary who forwarded them to the Mines Department.[17]

In its regular reports to shareholders, the Hampden company reported that to 28 February 1914 its expenditure on the 3 foot 6 line had reached £51,000 and its was expected to be finished to the Lady Flat terminus (22 ½ miles) by the end of April. '*A start has been made with the 2ft. gauge line from this point to the MacGregor mines (about 2½ miles), and that, it is expected, will be completed within the next four or five months. The engineer in charge estimates the balance required to complete the whole 25 miles of line at £21,500. The original estimate for this line (including the railway siding to the Salmon leases near Cloncurry) was £46,000.*'[18]

By 6 May, the earthworks of the unloading stage for ore transfer had been completed and earthworks for the line itself were well in hand for two miles. The first five bridges and drains would completed in the next week and the company anticipated that the rails would be laid to the Wallaroo mine in July and to the MacGregor group in September.[19] The ore transfer station was substantial, the 2ft gauge tramway terminating above the bins and the 3ft 6in gauge below, making the ore transfer by gravity efficient.

The railway plans included a 25 foot high dam wall to impound 30 million gallons of water in the gorge of Jimmy's Creek to provide a water supply for both 3ft 6in and 2ft gauge lines. The company, however, told Ainscow not to proceed beyond the plans and specifications. There was a permanent

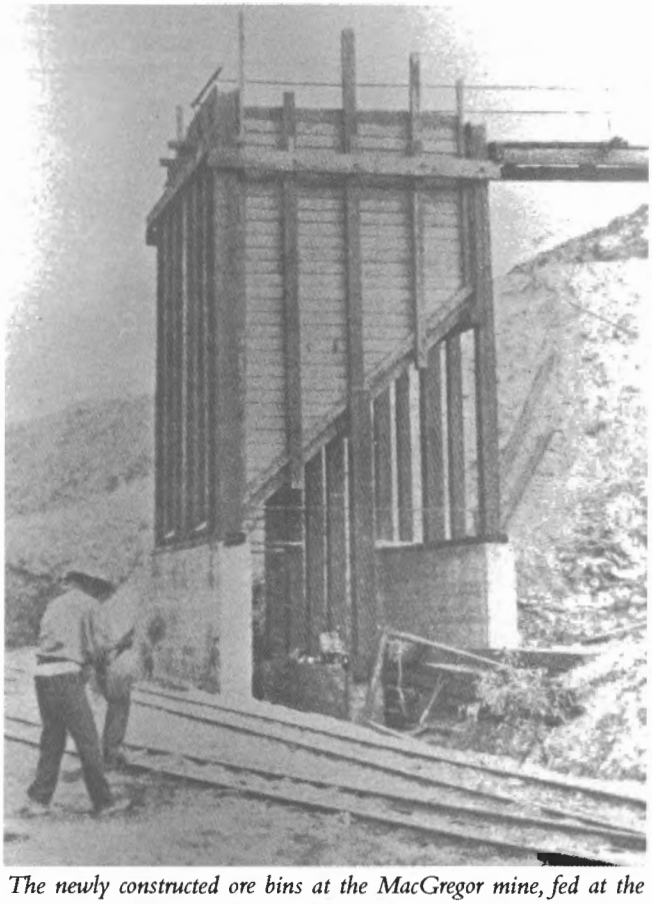
spring, known as Fountain Springs, 2½ miles away. Ainscow sent a blue print of the plans on 7 August, which practically marked the end of his work.[20] The tramway loco presumably was watered at the mine in the absence of the dam.

Everything was practically ready when the First World War broke out. Britain declared war on Germany on 4 August 1914, and Australia immediately regarded itself at war as part of the British Empire. Prohibitions on trading with the enemy meant that most of the Cloncurry companies had lost their principal source of income as Germany had been the principal buyer. The Hampden company ceased smelting until new financial arrangements were completed. This was done by the end of the month, but already there had been a large exodus of miners from the field. Smelting resumed on 9 September.[21]

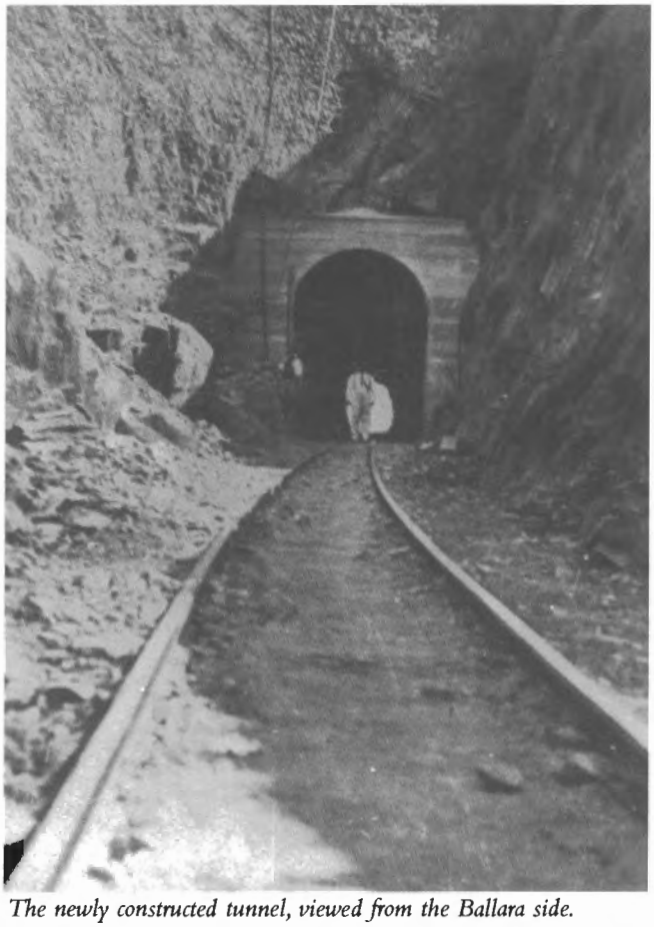
The 3ft 6in gauge line was completed and opened for traffic on 15 July 1914 although trains had been running since 25 May. According to Turner's reminiscences, a nameboard 'Huntley' was erected at the terminus to honour the company's General Manager.[22] Eric Huntley wanted none of this and insisted it be changed, and so the terminus became simply 'Mineral'.

This was confusing because the post office had referred to the locality as Ballara since 1909. The Deputy Post-Master General in Brisbane wrote to the Commissioner for Railways in November 1915 but as the Commissioner had no jurisdiction, the Railway Department passed the suggestion to the company. It immediately agreed to the change and before the month ended the new name was adopted.[23]

When the railway opened, the earthworks of the 2ft gauge line had been completed for practically the whole distance, and the rails laid to a point opposite the Wallaroo Mine, '*about half a mile short of the terminus*'.[24] It was still expected to take about twelve weeks to finish the work. In the six months to



The newly constructed ore bins at the MacGregor mine, fed at the top by a short tramway from the headframe and feeding into wagons on the tramline below.
From Queensland Government Mining Journal, *March 1916, p.212*



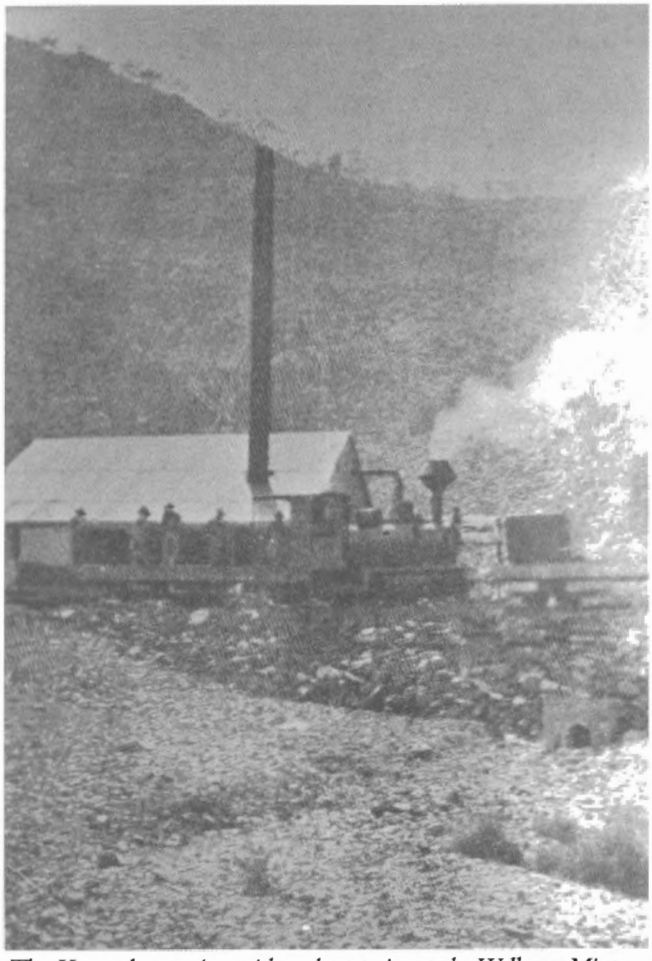
The newly constructed tunnel, viewed from the Ballara side.
From Queensland Government Mining Journal, *March 1916, p.119*

31 August, another £26,752/2/3 had been spent on both tramways. Even in November, none of the Kuridala ore came from the MacGregor Mines, a situation which continued for another four months.

Copper was, however, being produced at the Rosebud mine, 10 miles north east of Ballara. In 1914 the Willcocks Cloncurry Copper Syndicate Limited moved its smelter to Rosebud from Marraba, close to the railway six miles north of Malbon. Operating by the Corella Copper Company, Rosebud became a steady small producer for a few years. The copper matte was treated at Kuridala and I surmise was railed there from Ballara.[25]

Construction of the 2ft gauge tramway was sound and most of the earthworks survived long after it closed. The major obstacle was the range separating mine and railway. It was overcome by driving the only railway tunnel in western Queensland. It was five chains long and unlined, and although used only for about six years, remained sound when seen three quarters of a century later and now features on heritage trails in the region. Huntley reported on 11 March 1915 that the tunnel through MacGregor Hill had been completed, the rails laid through it and the earthworks underway the short distance to the mine.[26] The Board finally reported on 31 May that the tramway had been used to transport MacGregor mine ore to the smelters. Hampden treated 275 tons of MacGregor ores that month.[27]

Only one locomotive operated on the tramway, a Krauss 0-6-0WT locomotive brought to Australia before the war. It had a boiler operating at 160 pounds per square inch pressure, 7 inch diameter cylinders with 12 inch stroke, and 23 inch diameter driving wheels. It weighed 10 tons. The loco was builder's number 6416, one of a pair supplied to Diercks & Co., Melbourne in 1910.[28]



The Krauss locomotive, with a short train, at the Wallaroo Mine. From Queensland Government Mining Journal, *March 1916, p.212*

As for the rolling stock, photographs show the small hoppers used to convey ore from the Wallaroo and MacGregor mines to the ore bins. General purpose open four-wheel trucks would have been used to convey firewood and stores. It appears that little consideration was given to general traffic. There was no passenger carriage although the line could be credited with conveying thousands of passengers.

The government school opened at Hightville when the Education Department appointed Harriet Carr teacher and she commenced tuition on Monday 15 November 1915 with a dozen pupils, using a building provided by the company. She reported three days later she had 14 pupils and their most pressing problem was treatment for 'blight' which affected their eyes. The Education Department forwarded an opthalmia kit to improve their well being.[29] The health of the miners was probably equally in need of attention.

Operations and Traffic

During June 1915, ore was extracted from both Wallaroo and MacGregor Mines. In July, 928 tons of MacGregor ore was treated at Hampden, rising to 1154 tons in September, about 15 per cent of the tonnage of ore treated at the smelter. Output quickly exceeded 1000 tons monthly and plateaued at between 1,200 and 1,300 tons of ore trammed and railed to Kuridala each month.[30] The projected 100 ton daily output was never achieved.

For details of operations we are in debt to the engineer, W M Eyre, responding to an article in the *North Queensland Register* on 23 February 1916 which inferred that only German engineers knew how to construct light railways. He described the tramway from 'Minera' to the MacGregor mine, suggesting that he had visited before the name, Ballara, was adopted in late 1915. He described the line as five miles long, with a branch to Wattle mine which as far as I know was never constructed, although planned. He wrote that the line had 1 in 40 gradients, curves with a minimum of two chain radius and track laid on pressed steel sleepers. In that hot dry termite laden country, steel sleepers were practically indestructible and provided a track requiring a minimum of maintenance. Of course he mentioned the tunnel.

The Annual Report of the Mines Department for 1915 contains the only description I have found of the service: '*A 2-ft. gauge tramway, four miles in length, from Ballara, connects the MacGregor and Wallaroo mines with the main line, and carries 50 tons of ore per day in three train loads to Ballara, conveying firewood, mine timber and general stores as return loading.*' The Under-Secretary compiled his annual report from information supplied by the local wardens and mines inspector, in this case based at Cloncurry.[31]

Whether three trains ran every day, or simply three trains on days when a government train was being loaded at Ballara is a matter for conjecture. However it would have been convenient to convey the ore steadily to the bins as it was mined and the small Krauss was not designed for heavy loads.

The monthly company reports reproduced in the Queensland Government Mining Journal provide production data for the MacGregor and Wallaroo mines for much of their effective life, but the blanks indicate months for which I have no figures.

Year	**1915**	**1916**	**1917**	**1918**	**1919**	**1920**
January		987	687			
February		950	1165			
March		1106	1273			
April		1287	1156			
May	275	1312	1261			
June		1303	1285			
July	928	1381	1232	1119		
August		1272	755	1072		
September	1154	1071		1105		
October	1310			876	65	
November	1150			584	66	
December		439		0		
Total		**13225**	**12712**			
Ore Treated at Kuridala					40	165

When mining activity increased around Ballara it created a problem as there was no school there. Some seven children went to Hightville school, travelling, the District Schools Inspector, James Johnston, noted with disapproval in May 1917, on the tramway. They rode for free in the open ore trucks.[32] Those who did not so travel had no school at all.

Hightville people saw another risk; opening of a school at Ballara would deplete the numbers at Hightville and threaten its viability. This was before the days of free school bus transport and no-one suggested the department subsidise the provision of a suitable but basic carriage on the tramway.

AE Burt, secretary of the Ballara school building committee, agreed with the inspector about the danger of travelling per tramway, and succeeded in having construction of a new school building at Hightville delayed. The Under-Secretary, J D Story, was unwilling to build two schools for less than two dozen pupils, and Johnston suggested basic improvement to make the Hightville school habitable. Masterly inactivity continued as attendance rose to 40 and Ballara pupils continued their daily excursion by tramway, 17 of them, the new Ballara secretary, B Jones, reported in April 1918. He reported that

the children ride '*on the ore trucks at their own risk, which we think is a very dangerous mode of travelling, there being no provision made for their conveyance and they had to stand on the bogies of the trucks. Mr J Mullans, the newly elected member for Flinders electorate, had occasion to travel over this line recently and can vouch for the above*'. The arrangement was confirmed by Thomas Warrick, the mine manager, on 14 May. He explained how the company train ran from Ballara to Hightville each morning enabling scholars to be on time for school.[33] The children may well have walked home, being down hill, but then again the third of the daily trips to Ballara may have suited them and the trucks being loaded may not have deterred them.

By July 1918 Inspector Dennis had also reported on the risks of children travelling on the open ore hoppers, adding, '*although, so far, no accidents have happened*' but firmly recommended a new school at Ballara which was approved, subject to funds. It took until October to obtain executive approval for the new school by which time the Great War, which was sustaining the copper industry, was nearly at a close after four long years. During these months the children at Hightville had questionable tuition. Miss Carr's successor, Michael Timothy Killeen, had been transferred to Sapphire in Central Queensland and an alcoholic, Charles Niebel, was sent in his place. Killeen was transferred back after Niebel resigned.[34]

The Ballara school was not ready for the start of the 1919 school year but Killeen had few children at Hightville. As he reported on 31 January, the Ballara children now had no transport to school per tram train. '*This train has now ceased running owing to suspension of operations on local mines, consequently the children now are compelled to walk the distance which is a little more than two miles. Most of the children are very young and considering the nature of the country the journey to and from school is a very trying one.*'

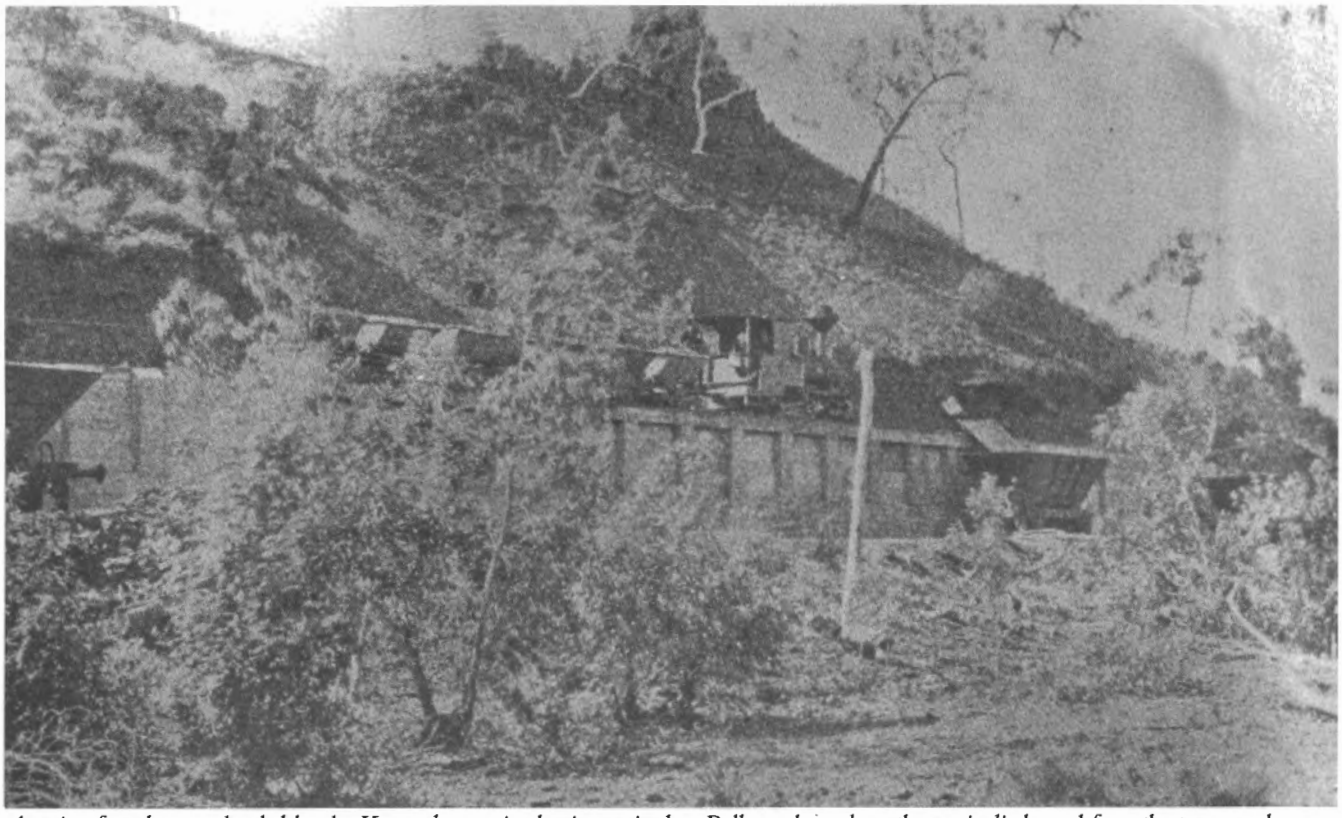
Production at the MacGregor mine in 1919 was spasmodic, and for most of 1919 the Hampden smelter was closed, reopening on 18 September. Only 40 tons of MacGregor ore was treated that year. Next year was little better, 165 tons in 1920.[35]

Ballara school was completed in May 1919 but did not open until 7 July awaiting the arrival of school requisites and furniture, finally provided by removing the furniture from Hightville. The days of children riding on the tramway had ended at the close of the 1918 year and the small tonnages of ore handled after that date would have required only a handful of runs by the Krauss.

The Hampden company had been optimistic in 1918. It invested in a new shaft, erecting poppet legs and double cylinder winch and by December it had reached 212 feet depth.[36]

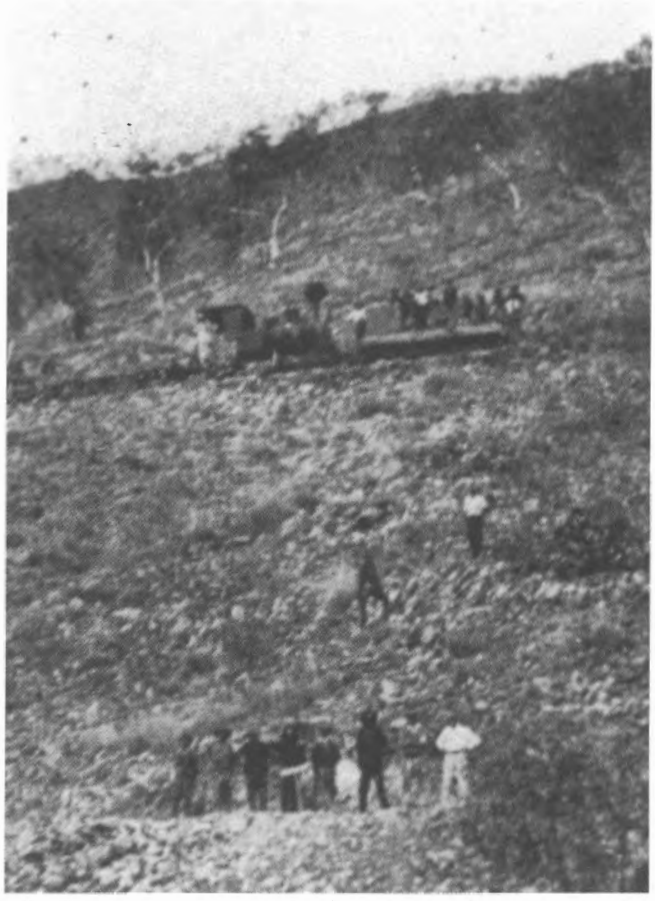
Up to October 1919, 44,206 tons of MacGregor and Wallaroo ore had been smelted at Hampden, or 8 per cent of the total ore treated to that date, leaving reserves of 27,500 tons of ore containing 1370 tons of copper yet to be mined. James Wharton, chairman of directors, told shareholders at the annual meeting work was continuing sinking the new main shaft at the Macgregor mine.[37]

The only work on the Macgregor mines in 1919 involved sinking the new (No.8) shaft to 480 feet. A crosscut encountered two shoots of 5½ per cent copper ore after 50 feet of driving, but the deposit was not economical to mine. During 1920 all work stopped. In all, less than 50,000 tons of ore were shipped over the 2ft gauge tramway which saw regular operation for only 3½ years. '*In closing down of MacGregor mine the Hampden Co. has lost what has been an important contributor of ore to the smelters. In acquiring the mine, which was always regarded as a low-grade proposition, and in the building of a tramway to it, a large amount of capital has been spent. In the main workings the shaft was sunk in 1919 to a depth of 480 feet, and during last year about 500 feet of driving and crosscutting was carried out under difficult conditions, but the only return obtained was from a small tonnage of ore extracted from the open-cut. The deepest mine workings are only 320 ft from the surface.*'[38] Laun's warning in his July 1911 report had proved only too accurate.



A train of ore hoppers hauled by the Krauss locomotive having arrived at Ballara, shows how the ore is discharged from the tramway hoppers into the larger four-wheel government-owned hoppers on the 3ft 6in gauge line, for railing to Kuridala.

From Queensland Government Mining Journal, *March 1916, p.211*



The Krauss locomotive and a short train, with some passengers apparently on board, on the MacGregor side of the range.
From Queensland Government Mining Journal, *March 1916, p.119*

Closure

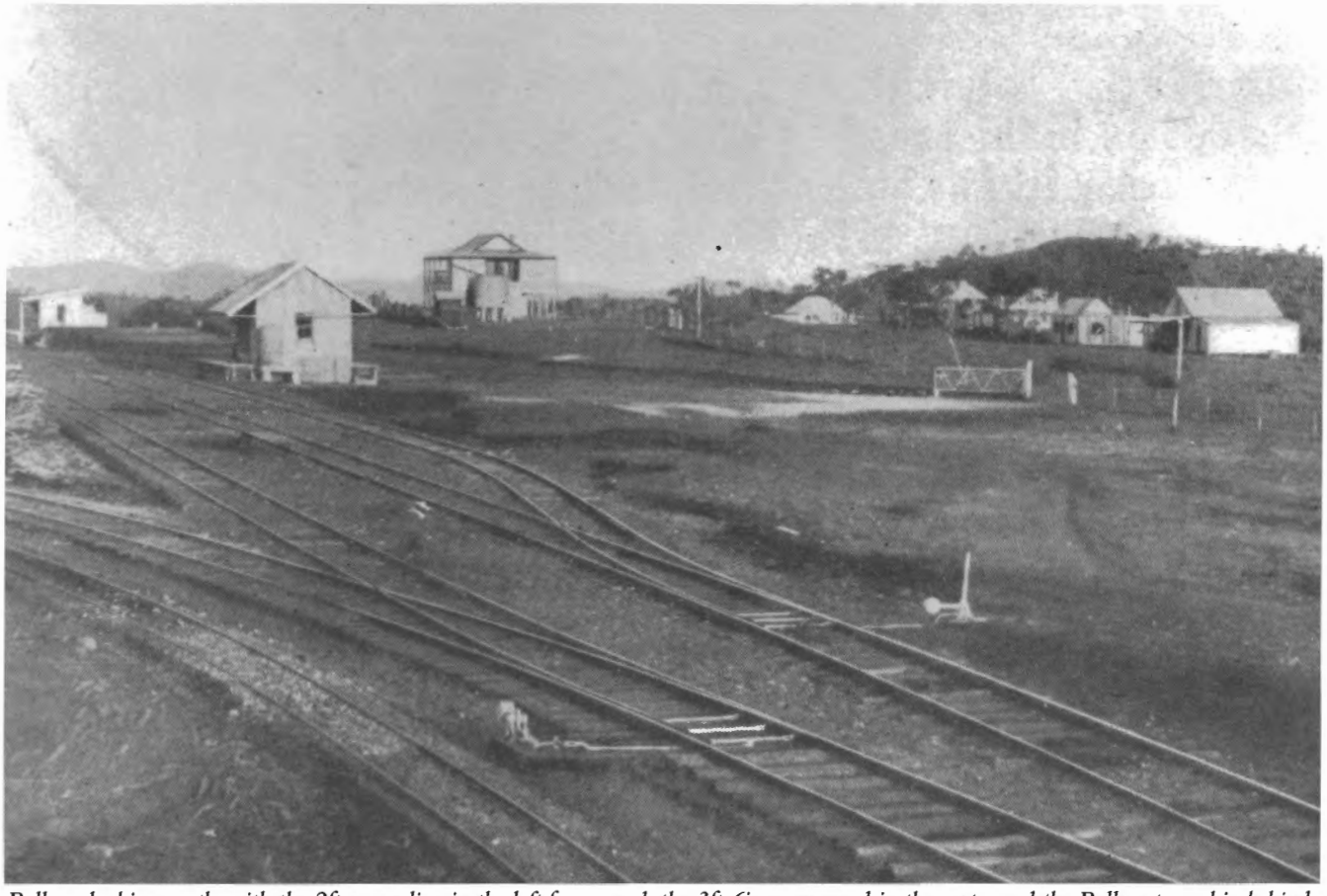
The directors reported to shareholders in December 1920 that '*Since the close of the half-year [on 31 August] your directors have, on the recommendation of the General Manager, authorised the cessation of all operations at the MacGregor mines and the dismantling and removal of all plant and equipment.*' The General Manager, Huntley, showed how higher wages, increased railway rates and fuel costs, and more expensive costs of realising ore, made it impossible to mine MacGregor ore profitably at the current price of copper. All work at the mine ceased in November 1920.[39]

With nothing to convey, dismantling of the tramway began in early 1921, probably in March. The Cloncurry Mines Inspector reported on 2 April that '*Operations in connection with the removal of the MacGregor tramway are proceeding and, in the course of a month or so, the job will be practically finished. A large quantity of material is now stacked at Ballara awaiting removal*'.[40] The Mines Department annual report for 1921 confirmed that the 2ft gauge tramway had been lifted.

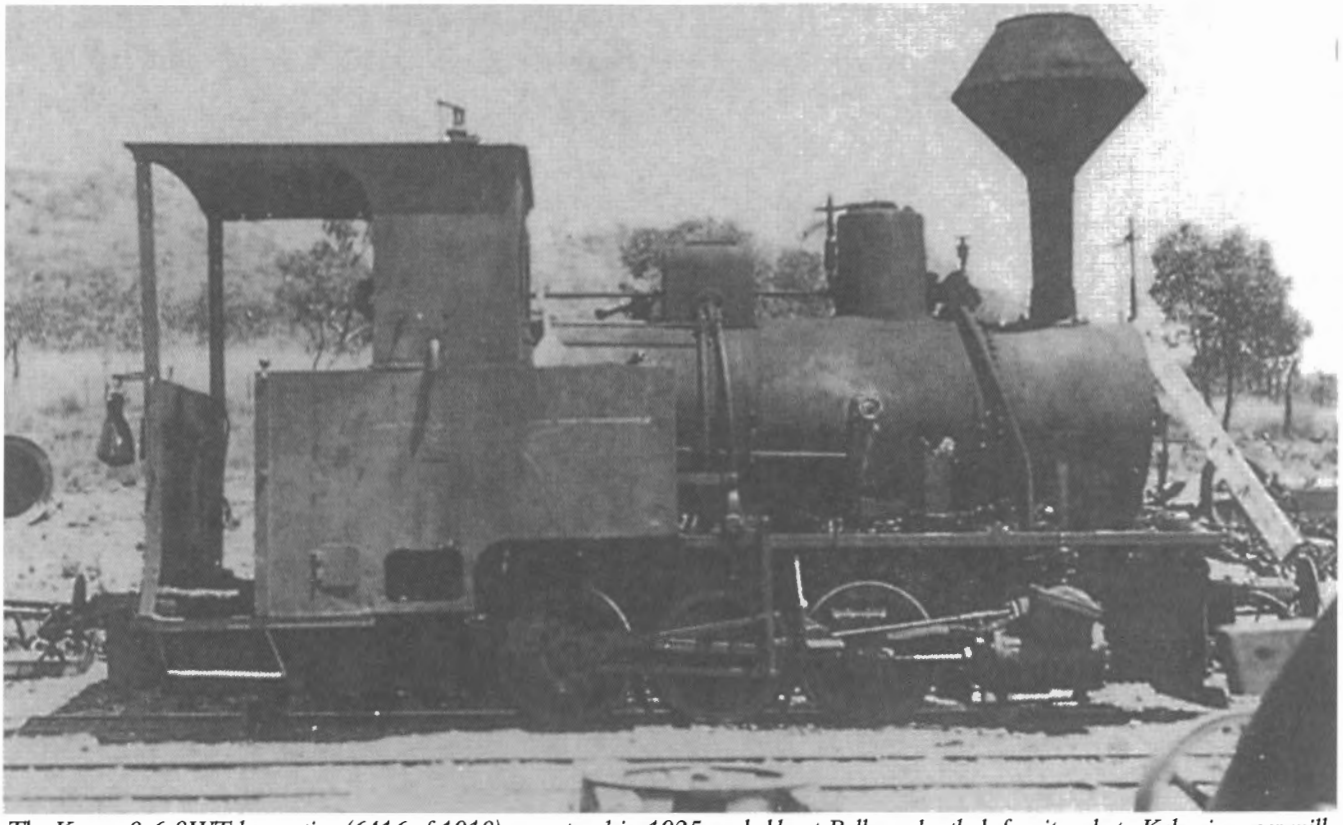
There was limited mining in the 1920s at Pindora and around Ballara. Train services to Ballara, at times only fortnightly and even monthly, continued until 1927. The only realisable assets belonged to the Railway Department but the 2ft tramway was totally company property. The sugar industry was expanding in the 1920s after years of turmoil and provided a ready outlet for 2ft gauge rails and locomotives.

The Krauss locomotive was sold to Australian Estates' Kalamia Mill but had a comparatively short life. It was reported as being abandoned there prior to 1940. John Browning advises that the locomotive was converted to a stationary boiler used for pumping at Plantation Creek.[41]

The lightly-used rails would have been in good condition and would have found a ready sale to the sugar industry. At the time, 28 pound rails equalled the best mainline standard in the



Ballara, looking south, with the 2ft gauge line in the left foreground, the 3ft 6in gauge yard in the centre and the Ballara township behind.
From Queensland Government Mining Journal, *March 1916, p.120*



The Krauss 0-6-0WT locomotive (6416 of 1910) seen stored in 1925, probably at Ballara, shortly before its sale to Kalamia sugar mill. Photo: John Browning Collection, ex-ANU Archives of Business & Labour

canefields. Whether they went to Kalamia or elsewhere I have not been able to confirm.

The Hampden-Cloncurry Copper Mines Limited was relieved of all liability for the 3ft 6in gauge line on 20 April 1921. The change of working took effect on 1 July 1921 with the Commissioner for Railways responsible after that date and the Mines Department providing the subsidy.[42]

The 3ft 6in gauge line lasted until 1927 when, by spending £100 on improving the road, the Mines Department was able to end its subsidy keeping the railway open.[43] Gougers could then truck their own ore and supplies, the Railway Department recovered its rails and another chapter closed. The Hampden company went into voluntary liquidation in 1928 and the last ore was railed from Pindora siding in the 1928-29 financial year, just 38 tons. The rails were lifted soon after.

The tunnel remains the permanent reminder of the 2ft gauge tramway. Locals knew of the old tunnel and in September 1968 Paul White of Mount Isa applied to lease *'two old disused railway tunnels situated approximately 500 yards south-west of Ballara.'* White referred to two tunnels about 400 yards apart, possibly misidentifying a mine tunnel as a railway tunnel, and may have been interested in mushroom growing, a common reason then for seeking to lease abandoned tunnels.[44] Nothing came of the application. Today the old tunnel is promoted as part of the state's mining heritage.

Endnotes

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11. John D. Kerr, 'The Wee MacGregor Tramway: A Novel Partnership for Government', *Australian Railway Historical Society Bulletin* August 2002 pp. 292-305.
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13. *North Queensland Register* 22 December 1913 p. 67; also MR 1913 p. 57.
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25. MR 1914 p. 59; QGMJ June 1914 p. 317.
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27. *QGMJ* June 1915 p. 302, 299.
28. G. Bond Notes; J.L. Buckland in *Light Railways* No. 126 October 1994 pp. 19-20.
29. EDU/Z1252; QSA; R.S. Kerr, 'Education at Hightville and Ballara', *Queensland Heritage*, Vol. 3 No. 5 (November 1976) pp. 3-9.
30. *QGMJ* July 1915 pp. 333-4; July 1915 p. 360; August 1915 p. 418; October 1915 p. 532; March 1916 p. 108.
31. MR 1915 p. 11; *QGMJ* March 1916 p. 107.
32. EDU/Z1252; QSA.
33. EDU/Z1252; QSA.
34. EDU/Z1252; QSA.
35. MR 1919 p. 60; 1920 p. 60.
36. *QGMJ* July 1918 p. 330; August p. 383; December 1918 p. 583.
37. *QGMJ* January 1920 p. 39.
38. MR 1920 p. 9.
39. *QGMJ* February 1921 p. 81; January 1921 p. 31.
40. *QGMJ* April 1921 p. 164.
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Vale Engineering Pty Ltd

by Craig Wilson

The Company

Vale Engineering Pty Ltd (Vale) was established in October 1967[1] on a large site on the outskirts of Moss Vale in the Southern Highlands of New South Wales, 140 kilometres south of Sydney, where a large modern facility was erected. The company was formed primarily to provide workshop facilities to a related company, Coal Cliff Collieries Pty Ltd, operator of Coalcliff Colliery, which was located on the South Coast 28 kilometres north of Wollongong. Coalcliff Colliery was even then an old colliery, having been opened in 1877 *(see LR 167)*, but it had large undeveloped coal reserves available to the west of the existing workings which justified expansion of the mine.

Coalcliff Colliery provided the initial base load of work for Vale. However there were a large number of other local collieries on the Southern Tablelands and South Coast and over time Vale sought business from these mines and became a supplier of original equipment, repair and refurbishment services, and mining hardware and consumables.

Coalcliff Colliery development

Kembla Coal & Coke Pty Ltd, owners of Coalcliff Colliery, commenced its expansion program in 1969 with a shaft sunk in the Woronora water catchment area to connect with existing colliery headings in the 7 North area. This shaft was to become the downcast shaft for a new colliery, Darkes Forest.

The following year saw a burst of activity with four further shafts being sunk, a bath house and office block commenced, and a return drift and a men and materials drift completed to facilitate access and movement of rail equipment to the new development areas. All of these facilities formed the nucleus of Darkes Forest Colliery. In 1971 Coalcliff Colliery was split, with No.1 area (coal close to the escarpment) and No.2 area (coal located to the north adjacent to Metropolitan Colliery) remaining part of Coalcliff, while the western part of the colliery's holding became Darkes Forest. As a result of these developments, by June 1973 coal production for both collieries had risen to 10,000 tons per day.[2] A 1067mm (3ft 6ins) gauge underground rail system provided transport for men and materials.

In 1975 construction commenced on a further colliery to the west of the Darkes Forest shaft. This colliery was named West Cliff, and apart from rail installed on the drift was worked by rubber tyred vehicles. North Cliff, another mine using rubber tyred transport, was opened in the late 1980s. By 1990, with most of the existing areas worked out, the decision was taken to close Coalcliff and Darkes Forest. The official date of closure was 31 March 1991.

Model BPC/3M jitney

When Vale Engineering was formed, man transport at Coal Cliff was a mixture of locomotive hauled carriages and a fleet of three diesel mancars. The diesel mancars had only recently arrived, having been delivered by E M Baldwin & Sons Pty Ltd in 1967. Fox Manufacturing Co subsequently supplied a further six, from 1969 to 1972.[3] In 1971 to meet the additional need for man transport, Vale built a battery powered vehicle designated as Model BPC/3M.

While Vale referred to this model as a man car, the design had reverted to a type similar to earlier jitneys, introduced to New South Wales coal mines in the early 1960s. These vehicles followed then current American practice. The low-sided four-wheeled vehicle had bench seating arranged along the side, and centrally located controls, motor and two battery boxes. They were once colourfully described as "bath tubs on wheels". Later, to meet Mines Department requirements, they were enclosed at each end and fitted with a roof.

The first of these jitneys (or "bugs" as they were called at Coalcliff) arrived in September 1971.[4] Mines Department approval for its operation underground was received on 10 January 1972.[5] Though official specifications have not been obtainable, the following are known:[6]

Length	4,700mm
Width	1,830mm
Height (body only)	1,250mm
Height above rail (est)	100mm
Capacity (inc. driver)	13 men
Weight	4.5 tonnes.
Final drive	Chain

Vale quickly constructed a fleet of the new cars with thirteen in service in 1973 and sixteen by June 1974. The builder did not allocate serial numbers to this production, although the Coalcliff roster numbers were affixed to the sides. This has necessarily left unknown the detail of individual deliveries and, because of the re-use of low numbers presumably first allocated to the nine diesel man cars, their order of delivery is also unknown.

A number of the diesel man cars were made surplus with only four (three Baldwin and a Fox) in service by June 1974.[7] At least two of these diesel man cars were fitted up later as ambulance cars and one as a fire car, so by then they may have been taken out of the man car numbering system. So far the following eleven jitneys have been identified from Coalcliff records or photographs and sightings: 1, 2, 3, 5, 11, 12, 14, 15, 17, 18 and 20.[8]

As built they were equipped with a single disc brake mounted on the motor shaft next to the chain drive. This must have been one of the last uses of disc brakes on underground rail vehicles and it was not long until, on 11 September 1972, a small fire occurred on one of the jitneys when oil from the chain drive ignited.[9] Like most early man cars they had a suspension mounted on hydraulic rams, which was judged as excessively harsh, although this was in comparison with the later cars that had an air suspension. They were also fitted with dump brakes, that were hand pumped by the driver, each one sited above a small hydraulic cylinder.[10]

The jitneys were located at the new Darkes Forest Colliery where underground charging facilities were established. There they undertook all the man transport for the new development and worked the existing areas transferred to Darkes Forest from Coalcliff Colliery. As development progressed the jitneys were joined by the newer Vale model BPC/4M battery cars and they shared duties with them, their battery capacity adequate for the five kilometre runs ultimately required.

Despite their basic design, they lasted in service with fourteen still on the roster in May 1985 and eight of those in service.[11] Replacement parts were by this time an ongoing problem and manning levels at both Coalcliff and Darkes Forest had been reduced.[12] By December 1990 they had been progressively retired with only two, numbers 2 and 12, still on the roster.[13]

At Vale Engineering Pty Ltd on 20 October 1989 were BPC/4M 27 and two BPC/3M 17 and 2. *Photo: Craig Wilson*

Model BPC/4M man car

If the design of the model BPC/3M had been dated, Vale's next design for Coalcliff was advanced. The model BPC/4M was undeniably a man car. The general specification was:[14]

Length	5,000mm
Width	2,000mm
Height (above rail)	1,400mm
Height above rail	120mm
Wheelbase	1,400mm
Capacity (inc. driver)	14 men
Weight	6 tonnes
Battery capacity (Dunlop)	423 ampere hours
Motor (Reliance T series)	15KW
Final drive	Chain

Two modern features were incorporated, an air bag suspension and 'Sevcon thyristor' control equipment. While thyristor controls had been pioneered in the first Titan man car approved for service in April 1975, that man car had been a prototype restricted to non-gassy areas. The BPC/4M was the first fully flameproofed battery man car incorporating these controls and the first one entered service at Darkes Forest on 22 October 1976.[15]

Additional cars did not come quickly. It appears that only one further had been delivered by April 1978 but a further nine were on the roster by May of the following year.[16] A total of sixteen were built for Coalcliff, probably all entering service that year. Like the earlier jitneys they were best identified by their roster numbers, which were carried in welded metal front and rear of the cars. For the BPC/4M the roster numbers were; 6 to 8, 19 and 21 to 32. By all reports they were well received at the two collieries. With a superior ride and accommodation, passengers liked the man cars and with their greater battery capacity they offered flexibility in operation. They could do three return trips to the work areas at Darkes Forest. Also, if available for a Deputy inspecting the conveyor at Coalcliff, the Deputy could ride in one direction while walking in the other and leave the car at Coalcliff to be used by the Deputy on the next inspection.[18]

They lasted to the end of rail operations. As operations reduced, two man cars, 21 and 26, were donated to the Zig Zag Railway Co-op Ltd in October 1991. These two cars were initially leased to Angus Place Colliery and then subsequently purchased by the Colliery.[19] Of the remaining fourteen, seven were sold at auction on 23 August 1993 with the rest having been sold for further service during the twelve months before. Sold for further service were man cars 6, 8, 22, 27 to 29 and 32. Offered for sale at the auction were man cars 7, 19, 23 to 25, 30 and 31.[20]

Locomotive work

By 1967, Coalcliff Colliery had a diverse fleet of battery and diesel underground locomotives to which it was adding further diesel locomotives (see appendix). These were either built new or modified, by another Moss Vale firm, Neil Moxon Pty Ltd. Spares orders to Baldwin for their man cars indicate that Vale undertook regular maintenance and it is likely that apart from the Moxon locomotives, all locomotive maintenance was switched to Vale.

The first evidence of substantial locomotive design work by Vale came with the purchase of five Jeffrey battery locomotives. These 10-ton, 34 HP locomotives had been acquired by AI&S with the purchase of Corrimal Colliery and being non-standard in the AI&S fleet were available for purchase.

They did not immediately go into service. A number of equipment component approvals from the Mines Department

Outside the front of the workshop building on 20 October 1989 was BPC/4M 26 on chocks for inspection. *Photo: Craig Wilson*

gazetted in December 1970 indicate the extent of re-design and modification by Vale. New designs listed for Vale manufacture[21] included the flameproof enclosure, a Honeywell dead man switch, resistance box, light switch box, upgraded battery voltage, cable separation box, camtactor box and circuit breaker. Moxon carried out modification to the electric motors, to Vale designs.[22] The five locomotives entered service in 1971.[23]

Two Gemco 15-tonne battery locomotives were added to the roster in 1976[24] but their arrival did not disguise the aged nature of the roster with the majority of the operational locomotives being between thirty and forty years old. It was not long until the decision was made to design and construct a number of replacement locomotives. The result was a single cab battery locomotive with the following specifications:[25]

Length (excluding couplings)	4,800mm
Width	2,000mm
Height (above rail)	1,510mm
Wheelbase	1,500mm
Weight	17.5 tonnes
Battery (Dunlop 70 cell)	1005 ampere hours
Motor (2 Reliance Super T series)	26KW
Final drive	Cardan shaft
Gearboxes (Clayton ratio 5.15:1)	Spur & bevel

The locomotives were provided with 'Sevcon' thyristor control equipment but not with dump brakes. The first two were at Coalcliff and Darkes Forest by May 1979. Further construction increased the number to six by May 1981. Ultimately eight locomotives were built of this design, numbered 18 to 25 on the roster.[26] The design was then upgraded to incorporate dump brakes and multiple unit controls. These controls allowed up to three locomotives to be controlled by one driver through two air and one electrical connection. These controls were a failure in service and were later removed. Of this model at least four were built, numbered 26 to 28 and 30.[27]

The possible existence of a number 29 has been investigated, as there appears no reason otherwise for the numbering adopted. The Colliery records consulted did not cover the whole period back to 1983 but neither did they refer to such a locomotive. The colliery electrical engineer, Len Garforth, whose employment covered the whole period, could not recall either a locomotive nor a reason for the gap.

The locomotives are recalled as operating successfully and were, apart from one, still on site at the closure of the group activities. At the auction on 23 August 1993 eight were purchased for Teralba Colliery, numbers 18 to 20, 22, 24, 27, 28 and 30. Number 26 was not offered at auction as it had already been sold directly to Teralba.[28] Numbers 21 and 25, both of which required major repair, were noted in the yard of Vale Statutory & Mining Services Pty Ltd derelict in October 1998, not having been offered at auction.[29] The fate of number 23, which required a major rebuild of its electronic controls, has not been ascertained but it probably went for scrap.

Angus Place Colliery

Newcom Collieries Pty Ltd developed Angus Place Colliery in 1979 to replace its nearby Newcom Colliery. Angus Place was designed to use rail transport. However most of the rail equipment available for transfer was aged and inadequate for the use anticipated at the new colliery.

To equip Angus Place three BPC/4M man cars and two battery locomotives were delivered by Vale in 1980. The man cars were numbered PC01 to PC03,[30] and remained in service until the availability of surplus Gemco man cars allowed their progressive withdrawal. The first known disposal was PC02 sold at auction at Newvale No.1 Colliery in September 1993[31] while PC03 worked at least until September 1999[32] and was ultimately

The older styling of the BPC/3m is apparent in this photograph of 17 and 2. No.2 would continue in service up until at least December 1990, becoming one of the last of this model in service. *Photo: Craig Wilson*

The railway laid at Moss Vale was simple. Curving to the east, rail entered the front of the Shop to facilitate delivery and at the rear of the Shop, and unconnected, rail exited joining outside a short storage siding and an inclined test track. 26 was pictured on the test track on 20 October 1989. *Photo: Craig Wilson*

noted in Sims Kooragang Island scrap yard in May 2001.[33] In between the colliery took the opportunity to purchase two second-hand cars (Coalcliff 21 & 26) from the nearby Zig Zag Railway Co-op. They too were ultimately disposed of.

The two battery locomotives were initially numbered BL01 and BL02 on the Angus Place roster. However they were renumbered in a Newcom group roster as numbers BL07 and BL08.[34] BL08 was the surface shunter at the colliery for many years and was last noted in that role on 14 August 2000.[35] BL07 was disposed of in the intervening period.

Liddell Colliery

With the closing of Coalcliff a large number of modern, well maintained man cars and battery locomotives were available for purchase at second-hand or scrap prices. For a colliery manager with a limited capital budget and the need for replacement equipment, they were an attractive proposition.

Laurie Ireland, manager of Liddell Colliery, was one who was looking at purchasing replacement man cars. He had obtained a Titan and a Gemco battery man car for evaluation during 1991 though no purchase eventuated. In June 1992 negotiations were underway[36] for the purchase of seven man cars and they arrived soon afterwards. Liddell Colliery, being an ex-Coal and Allied Industries colliery, still used their numbering system and they were renumbered on this basis. The cars and their new roster numbers[37] were:

Coalcliff roster No.	Liddell roster No.
27	2662
22	2663 TOAD
8	2664
28	2665
29	2666
32	2667
6	held for spares

Their service at Liddell was not to be long. The Vale cars were withdrawn by April 1994[38] and sold the next month to Balcomb Recyclers Pty Ltd.[39] The Colliery was to close early in the following year.

Teralba Colliery

The locomotives were to gain a longer reprieve. Number 26 was sold first to FAI Mining Ltd, owners of Teralba Colliery. Eight more were purchased by FAI Mining at auction at Coalcliff Colliery and the Vale works on 23 August 1993. Five of these were sent to Ultimate Control Systems Pty Ltd for overhaul prior to going to Teralba. Six were returned to service with 19 as the designated surface shunter at the Teralba shaft and 22, 26, 27, 28 and 30 in service underground. Later, in April 1996, number 24 was repaired though it was not seen in service.[40] The remaining two, 18 and 20, were stored at Northgate Portal,[41] the old Stockton Borehole Colliery site where there was a drift and surface charging facilities for the Vale locomotives that went underground.

Two locomotives, 18 and 20, were sold for scrap with their remains being noted at Sims Kooragang Island yard in November 1999,[42] leaving seven at the colliery until its closure in May 2001 when they were stored.[43]

Vale Engineering Pty Ltd closure

Vale was not to continue operations long beyond the closure of Coalcliff and Darkes Forest Collieries. In July 1995 Kembla Coal & Coke announced that Vale was to be closed by the end of the month. This would deliver cost savings of four million dollars.[44] It was proposed to hold discussions with Vale staff to *see whether they could take over portions of the business.*[45] It is understood that these discussions ultimately led to the formation of Vale Statutory & Mining Services Pty Ltd which continues today operating out of the old Neil Moxon Pty Ltd Workshop in Moss Vale.

At the rear of the workshop on 20 October 1989 are locomotives 28 and 22 under repair. At this late date there were six mancars (2, 17, 22, 26, 27 and 29) under repair and four locomotives (19, 22, 26 and 28) under repair with locomotive 23 stored unservicable. Photo: Craig Wilson

On the afternoon of 21 August 1989 a visit was paid to Metal Recyclers at Unanderra to check on the yard. Amongst the rail equipment awaiting the scrappers torch was BPC/3M 15. The frame of Coalcliff locomotive No 11 is underneath 15 and to the left can be seen the end of BPC/3M 11. All had been delivered ten days before. *Photo: Craig Wilson*

Appendix : Coalcliff locomotive notes

The Vale battery locomotives were to complete one of the most interesting colliery rosters on the New South Wales coalfields. There is much left to discover on the locomotives and their operation and the following known details are offered in the hope that others can undertake research and progress the subject.

The Coalcliff roster appears to have had separate numbering systems for battery and diesel locomotives. The battery locomotive roster for many years consisted of ten Mancha locomotives of two sizes (8 and 10-ton) purchased from Cessnock No.1 Colliery. Confirmed from Mancha records as delivered to Cessnock No.1 were serial 2092, 2114, 2173, 2381 and 2382. The Manchas were followed by the five ex-Corrimal Jeffreys. These were 11 (Jeffrey 9063 of 1958), 12 (9064 of 1958), 13 (8757 of 1949), 14 (not known) and 15 (8279 of 1942). The two Gemco locomotives were presumably 16 and 17, and the Vale locomotives filled out the rest of the roster. Additionally a photograph was taken at Coalcliff in 1982 of a Jeffrey design BHP-built locomotive numbered 4. This could have either been purchased or leased from AI&S.

On the diesel roster were four Hunslet locomotives from Cessnock No.1 Colliery. These were 1 (4089 of 1951), 2 (4090 of 1951 rebuilt Moxon 1967), 3 (4501 of 1953) and 4 (4549 of 1953). Number 5 was Tulloch 21 of 1960. Second-hand Com-Eng tunnelling locomotives numbered 6 (J1033 of 1959) and 7 (J1032 of 1958) were flameproofed by Moxon in 1967. Numbers 8 and 9 were built new by Moxon in 1968 and 1970.

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Industrial Railway NEWS

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NEW SOUTH WALES

BLUESCOPE STEEL LTD, Port Kembla

(see LR 177 p.18)
1435mm gauge
BlueScope Steel has repainted 1000hp GEC Australia Bo-Bo DE D40 (A.241 of 1972) in the yellow/blue/white/black livery. This is the first full repaint since the company name change. It was outshopped on 15 June.
Chris Walters 6/04

CRT BULK HAULAGE PTY LTD, Yennora

(see LR 170 p.18)
1435mm gauge
In spite of the previous report, the two Walkers 73-class B-B DH locomotives previously leased from Pacific National now appear to be owned by CRT. 7334 (696 of 1972) was transferred by rail from Yennora to Altona, Victoria, departing Sydney on 28 June and arriving at its destination two days later.
John Cleverdon 6/04;

THE MANILDRA GROUP

(see LR 177 p.18)
1435mm gauge
On May 31, Goninan B-B DE BHP 48 (012 of 1961) was noted in the yard at Goninan's, Broadmeadow, with heavy pilot and cab modifications being carried out. In Shed C10 was similar locomotive BHP 51 (015 of 1961) with the same modifications. This work is being done to bring the locomotives up to accreditation requirements for service with Manildra, and they are expected to be numbered MM03 and MM04.
As predicted, Walkers 73-class B-B DH 7340 has been transferred from the Manildra mill to Narrandera, via Bomaderry, completing the first leg of its journey on 2 July. It had previously spent

Top: *Manildra's Clyde Co-Co DE MM02 (64-342 of 1964) basking in the late evening sun at Gunnedah on 9 June 2004. Photo: Bob McKillop* ***Centre:*** *Following servicing and repainting at Bingera Mill, EM Baldwin B-B DH* MOORLAND *(5565.1 10.74 of 1974), formerly Moreton Mill's* COOLUM, *has a test run around South Kolan before its transfer to Fairymead Mill, 9 June 2004. Photo: Jeff Driver* ***Above:*** *Farleigh Mill Walkers B-B DH locomotives 37* CALEN *(692 of 1972 rebuilt Bundaberg Foundry 1995) and 38* MICLERE *(664 of 1970 rebuilt Farleigh 1996), double heading an empty train on Pleystowe's Mia Mia line, 26 June 2004. Photo: Tom Badger*

Top: *4-tonne bins from Moreton Mill awaiting reassembly at the old Goondi Mill site on 22 June 2004. Mourilyan Mill is now using large numbers of these bins. Photo: Chris Hart* ***Centre:*** *A speedy death. The track demolition sled towed by a pair of locomotives makes short work of separating rails from sleepers at Moreton Mill on the Dunethin Rock line, May 2004. Photo: Peter MacDonald* ***Above:*** *Moreton Mill's Clyde 0-6-0DH* MORETON *(63-289 of 1963) was transferred to Innisfail at the start of June 2004. It was unloaded at South Johnstone Mill, where it was photographed on 22 June, and moved to Mourilyan a few days later. Photo: Chris Hart*

time with EDI Rail at Kelso, where it was repainted, returning to Manildra at the end of April.
Brad Coulter 5/04; Doug Williams 6/04; "Hunslet" 6/04; Phil Clarke 6/04; Melanie Dennis 6/04; Neville Conder 7/04

QUEENSLAND

BUNDABERG SUGAR LTD, Bingera, Fairymead & Millaquin Mills

(see LR 177 p.18 & 20)
610mm gauge
Millaquin Mill's Clyde 0-6-0DH *ASHFIELD* (65-441 of 1965) was returned by semi-trailer from Mourilyan Mill on 31 May.
Following slack season maintenance at **Bingera** Mill, EM Baldwin B-B DH locomotives *MIARA* (8988.1 6.80 of 1980) and *FAIRYDALE* (10048.1 6.82 of 1982) were returned to **Fairymead** Mill on 3 June. They were followed on 9 June by Bundaberg Foundry Engineers B-B DH *BOOYAN* (001 of 1991). Ex-Moreton Mill EM Baldwin B-B DH *MOORLAND* (5565.1 10.74 of 1974) has been serviced and repainted at Bingera and carries a new nameplate to replace the painted name *COOLUM*. It was sent across to Fairymead Mill on 17 June.
An exchange of EM Baldwin B-B DH locomotives between Fairmead and Millaquin took place on 17 June. *FAIRYDALE* was transported by road transport to Millaquin while *BUCCA* (6104.1 8.75 of 1975) made the return journey.
A set of trailable points from the Moreton Mill yard were due to be installed on the Fairymead system at 40 Windmill Junction. Also at Fairymead, the rails in the empty yard and the line around the bagasse bin were being welded in early June.
Malcolm Moore 4wDH "Hydro" (1025 of 1943) is still in service at Bingera Mill, and has recently been noted attached to the rail welding wagon.
Lincoln Driver 6/04

BUNDABERG SUGAR LTD, Moreton Mill

(see LR 177 p.19)
610mm gauge
At the start of May, the remaining bins in the mill yard were hauled to Howard Street yard. During the month, EM Baldwin 0-6-0DH *PETRIE* (6/2300.1 6.65 of 1965, Clyde 0-6-0DH *MORETON* (63-289 of 1963), and Malcolm Moore 4wDM *JIMPY* (1051 of 1943) remained with the demolition train, working on the Dunethin line. The train had returned to the mill yard by the end of May and on 1 June, *MORETON* was loaded onto a low loader and departed to Innisfail.
During the first week of June, the tracks in the full yard at the mill were removed, using EM Baldwin 0-6-0DH locomotives *BLI-BLI* (6/1257.1 7.65 of 1965) and *PETRIE* to haul the demolition sled. To maintain a connection to the loco shed and the lines in front of the mill office, a section of track had to be laid at the entrance to the mill yard to replace a couple of points that had been removed. On 6 June, apart from the locomotives in the loco shed and mill yard, a Gemco track jack was also noted on its carrying wagon.
On 9 June, the demolition train, including *BLI-BLI*,

PETRIE and *JIMPY*, moved to the Paynter's Creek line. Because new traffic lights have been installed at the junction of Howard Street and Ann Street, police traffic control is now required to allow the train to pass. On the same day, the last four intact cane bins were removed by road transport from Howard Street yard to North Arm for cleaning and transport to Innisfail. It is understood that more than 1180 bins were transferred, with a consignment seen on the road as late as 30 June.
Carl Millington 5/04, 6/04; Chris Hart 6/04; Editor 6/04

BUNDABERG SUGAR LTD,
Innisfail district mills
(see LR 170 p.19, 174 p.21 & 177 p.19)
610mm gauge
It has been revealed that the **Mourilyan** Mill Clyde 0-6-0DH damaged in a fire in the 2003 season was 18 (56-83 of 1956). The fire seems to have engulfed the cab and fuel tank / exhaust area. The cab is sitting on the ground near the loco shed while the frame, gutted of everything under the hood, but still with running gear, is in the mill yard. The buffers have been removed, probably for reuse.
During the weeks leading up to the start of the season, two **South Johnstone** navvy locomotives that have not received their new numbers were observed at work in the Mourilyan mill area. On 8 June, Baguley 0-6-0DM 10 (3390 of 1954) worked a navvy train down to Keepit on the Mourilyan Harbour line in connection with bridge works. It was at Mourilyan Mill on 22 June. On 9 June, Com-Eng 0-6-0DM 7 (AI57111 of 1975) was noted on the weed train at Martyville. By the end of June, South Johnstone navvy locos 10, 7 and 28 (Com-Eng 0-6-0DM AA1544 of 1960) were all back in the navvy yard at the mill. In the meantime, Mourilyan Mill's Clyde 0-6-0DH 11 (55-64 of 1955) was doing an extensive tour of the systems. In the first week of June it was seen light engine on various South Johnstone branches south of the mill. On 17 June it was delivering empties in the Currajah area, and on the following day was noted light engine in **Babinda** territory at Daradgee. On 22 June it was in the yard at Goondi and on 25 June was noted delivering empties at Boogan. This locomotive has had its GM engine replaced, possibly with a Cummins.
Ex-Moreton Mill Clyde 0-6-0DH *MORETON* (63-289 of 1963) was noted on 22 June in the loco shed at South Johnstone Mill, where it had been unloaded from road transport. By 29 June it was at Mourilyan Mill. Travelling in the opposite direction was EM Baldwin B-B DH 26 (7244.1 8.77 of 1977), which was transferred from South Johnstone to Mourilyan Mill for the 2003 season. It temporarily returned for use on the Nerada run when South Johnstone's EM Baldwin B-B DH 24 (5477.1 8.74 of 1974) suffered an engine failure on 22 June, the first day of the 2004 season. The engine has been sent away to

Top: *Newly arrived back at the mill on 21 June 2004 following rebuilding by On Trak Engineering in Sydney is Proserpine Mill's EM Baldwin B-B DH 9 (6626.1 7.76 of 1976). Photo: Tom Badger*
Centre: *Walkers B-B DH TULLY-5 (650 of 1969, rebuilt Walkers 1993) in trouble at Jaffa on 28 June having overshot the end of a siding. Mill personnel work to rerail it. Photo: John Browning*
Above: *The operator keeps a close eye on proceedings as Victoria Mill's remotely controlled sugar loco backs empty boxes under the loading hoppers at the mill, 1 July 2004. Photo: John Browning*

Cairns for repair. 26 was back at Mourilyan by 2 July for the start of the crushing there, which was delayed by rain for a few days.

Large numbers of ex-Moreton Mill 4-tonne bins are to be seen on the Mourilyan Mill system. They were reassembled at Goondi and have had white paint applied to the side chassis and centre bin frame member. Large numbers of discarded Mourilyan and South Johnstone bins were noted at Goondi.

On June 23, Babinda Mill's 0-6-0DH locomotives 4 *HARVEY* (AD1138 of 1960) and 5 *BRAMSTON* (AH2460 of 1962), working in multiple, were at Currajah with a rake of empty bins for delivery to the South Johnstone system, with South Johnstone's Com-Eng 0-6-0DH 38 (AH4695 of 1965) waiting to pick them up. The connection between the Mourilyan and South Johnstone mills here incorporates a back shunt but negotiations have been going on with the Johnstone Shire Council and local landowners to install a direct connection.

At Babinda Mill, Clyde 0-6-0DH multiple-unit pair 2 *GOONDI* (55-56 of 1955) and 3 (56-90 of 1956), formerly named *DARADGEE*, were noted on 29 June. 3 has now had its engine refitted, having been noted running with *GOONDI* in 2002 without it.

The five kilometre Mourilyan Mill branch south of Liverpool Creek will not be used in 2004 because of flood damage to the bridge at Lower Cowley. An extension of a couple of kilometres from a South Johnstone line would connect to this line without a need to restore the bridge.

It has previously been reported that the impressive 'Silver Bridge' across the Johnstone River at South Johnstone is in need of replacement. This bridge serves the entire network south of the mill and has a speed and weight restriction. A small example of the problems caused by this was noted on 29 June when EM Baldwin B-B DH *LIVERPOOL* (10385.1 8.82 of 1982) was to travel light engine from the mill to Japoon with its Clyde brake wagon. The locomotive had to leave the brake wagon at the mill side of the bridge before proceeding to cross at walking pace. Com-Eng 0-6-0DH 38 then propelled the brake wagon across the bridge before returning at the same funereal pace.

Peter Murray 6/04; Rod Milne 6/04; Chris Hart 6/04; Editor 6/04, 7/04

CSR LTD, Herbert River Mills

(see LR 177 p.19)

610mm gauge

Victoria Mill started crushing on 7 June on one side of the mill as a trial for an early start for growers south of Ingham. This was curtailed after a few days and crushing from both mill areas started in earnest on 15 June, with **Macknade** starting on 21 June. New load limits have been set, with 260 4-tonne bins the load for a Baldwin bogie locomotive and 330 the limit for a Walkers. Normal sugar train limits have been reduced to 88 at Victoria Mill and 42 at Macknade, to reduce turnaround time for trains at the Lucinda bulk terminal. A number of sugar box containers purchased from Mourilyan Mill were noted at the Victoria loading hoppers where there is a workshop dedicated to the maintenance of sugar train rolling stock.

A number of locomotive transfers took place in the period leading up to the start of crushing. EM Baldwin 0-6-0DH *HOBART* (4413.1 7.72 of 1972) and Clyde 0-6-0DH locos *CANBERRA* (65-433 of 1965) and *INGHAM* (64-382 of 1964) returned from Macknade to Victoria following slack season maintenance, although work on HOBART's final drive had not been completed. Travelling between the two mills on navvy duties at various times in May and June were Victoria's EM Baldwin *Sugarworld Shuttle* (9109.1 9.80 of 1980) and Macknade's Clyde 0-6-0DH locos 16 (DHI.1 of 1954) and 18 (DHI.5 of 1954). More unusually, once crushing began at Victoria, Macknade's 16 & 18 were both utilised on cane haulage duties there to cover loco breakdowns, returning to Macknade for the start of the crush there. Victoria Mill's EM Baldwin B-B DH *BRISBANE* (5423.1 9.74 of 1974) was sent to Macknade to help with the haulage of northside cane at the start of crushing but soon had to return to Victoria because of loco shortages there. With both its vintage Clyde locomotives, 16 & 18, in use on cane haulage at the start of July, Macknade was hoping that a Clyde V8 locomotive would be transferred from Victoria to assist.

In mid-May, trials began with the use of Walkers B-B DH *CAIRNS* (681 of 1972 rebuilt Bundaberg Foundry 1997) as a remote shunting unit for use on bulk sugar trains. The locomotive can be remotely controlled from the ground using a hand-held device. It is intended that this will become a driver-only operation, but a driver's assistant was working at the start of July while problems were being ironed out.

Walkers B-B DH *CLEM H McCOMISKIE* (605 of 1969 rebuilt Walkers 1991) returned to Victoria Mill from rebuilding at Solari Engineering at the end of May, and work was continuing in fitting out its cab at the start of July.

Two Victoria Mill locomotives, full yard shunter *DALRYMPLE* (ClydeQ 0-6-0DH 70-709 of 1970) and EM Baldwin B-B DH *ADELAIDE* (7070.2 4.77 of 1977) were repainted in the slack season and contrast with many of the mill's Baldwin and Clyde locomotives, which are in very mediocre external condition.

In the period 15 to 21 June, Macknade cane was brought to Victoria Mill for crushing. The Forest Home area was worked by a Victoria loco on the afternoon shift and the Halifax and 4-Mile areas on the night shift. Two Macknade-based locomotives worked the cane from the Macknade north side. Following the commencement of normal crushing operations, two rakes of cane are scheduled for transfer from Victoria to Macknade on each of afternoon and night shift, usually hauled by Macknade's EM Baldwin B-B DH 20 (7070.4 4.77 of 1977).

Motor Rail 4wDM 'Simplex' 4 (10232 of 1951) is used in the truck shop at Macknade Mill. Two other locomotives of this type have been converted to ballast ploughs and were noted at Victoria Mill on 1 July. They are 3717 of 1925 and 10381 of 1953. The latter was involved in the derailment accident on 24 March (see LR 177) and was being refurbished.

Only two Hansen line cars are still available for use. *L-CAR 3* (1920 of 1978) is based at Macknade, and was being used to establish GPS co-ordinates around the tramline systems in June, while *L-CAR 5* (34 of 1972/3) is to be found at Victoria. *L-CAR 2* (56 of 1972/3 and *L-CAR 4* (78 of 1972/3) have been dumped in the scrap area at Victoria Mill.

Deliveries of new bogie 11-tonne bins from Rinaudo Engineering have continued. These are of the fully-galvanised type. They are delivered to a siding on Macknade Mill's Wharf line and then hauled to Victoria Mill.

Locomotives that are out of use include Victoria Mill's EM Baldwin 4wDH 8002.1 8.78 of 1978, which has been without an engine for many years, and Macknade Mill's EM Baldwin 0-4-0DH 17 (6/1446.1 9.65 of 1965) which needs new tyres.

Steve Allen 5/04, 6/04; Chris Hart 5/04, 6/04, 7/04; Editor 7/04

CSR PLANE CREEK PTY LTD

(see LR 172 p.21)

610mm gauge

Walkers B-B DH 4 CARMILA (676 of 1971 rebuilt Bundaberg Foundry 1996) is fitted with a remote shunting unit, enabling it to be remotely controlled from the ground using a hand-held device. This application will involve driver only operation in 2004, following industrial action and an Industrial Commission ruling.

The remains of Com-Eng 0-6-0DH 3 (FA1036 of 1959), which disappeared from 'rotten row' in 2002, were taken to the Shannon's Flat navvy depot for possible conversion into a track maintenance vehicle, and as far is known are still there. The cab from this unit was removed for possible use on another locomotive, but is reportedly still stored outside the truck shop at the mill.

Tony Wells 5/04; *Daily Mercury* 12/5/04

GYMPIE GOLD LTD

(see LR 172 p.22)

610mm gauge

Following the Southland Colliery fire in December, it appears that this company will be liquidated. All assets are up for sale including the Gympie mine with its extensive underground workings served by narrow gauge railways. A final decision is expected at a creditors' meeting on 28 July.

http://www.gympiegold.com.au/releases/FYE2004/1088404767_17841.html

HAUGHTON SUGAR CO PTY LTD, Invicta Mill, Giru

(see LR 175 p.21)

610mm gauge

One the return run from Dalbeg on the afternoon of 7 June, EM Baldwin B-B DH *BURDEKIN* (10215.1 7.82 of 1982) caught fire. The cause was a stuck piston on the torque converter retarder. The wiring harness was completely destroyed and the locomotive was towed home by Walkers B-B DH *HODEL* (687 of 1972 rebuilt Bundaberg Foundry 1995).

Two days later, a shunting mishap involving

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Westfalia B-B DH *STRATHALBYN* (13863.1 8.91 of 1991) and its brakewagon left the brakewagon seriously damaged with its 60mm thick buffer plate fractured.

Local press coverage claimed that an empty train had run into a full train at Clare on 1 July but this was incorrect. An empty train hauled by Walkers B-B DH *MINKOM* (710 of 1983 rebuilt Bundaberg Foundry 1996) was erroneously diverted into a siding, colliding with some full bins. It was reported that the loco crew was breathalysed by police.

Two locomotives are fitted as remote shunting units, meaning that they can be driven from the ground using hand-held controllers. Walkers B-B DH *CROMARTY* (708 of 1973 rebuilt Bundaberg Foundry 1996) was already so equipped, and has been joined this year by *HODEL*. These will be used exclusively on the Millaroo and Mitchell / Mulgrave runs.

Maximum load allowable with the Walkers locomotives is 266 6-tonne bins (plus 10% at the discretion of the driver). More could be pulled but the limiting factor is the Willison automatic couplers.

Jason Lee 5/04, 6/04, 7/04; *Townsville Daily Bulletin* 2/7/04 via Peter Murray.

MACKAY SUGAR CO-OPERATIVE ASSOCIATION LTD

(see LR 177 p.20)

610mm gauge

Pleystowe Mill is back in full operation for the 2004 season, and all traffic control for the four mills is being centralised there.

Farleigh Mill's Maraju/Sugar Shed line was lifted during May. This was the shortest of three branches between the Bruce Highway and river close to the mill, and included a level crossing with QR.

Two Farleigh Mill Walkers B-B DH locomotives, 37 *CALEN* (692 of 1972 rebuilt Bundaberg Foundry 1995) and 38 *MICLERE* (664 of 1970 rebuilt Farleigh 1996), have been noted operating in locotrol mode on Pleystowe Mill's main line to Mia Mia. On the morning of 26 June they were double heading (cabs leading) with empties and with a bogie brake wagon at the rear of the rake. In the afternoon they were on their way back through North Eton with 6-tonne fulls. *CALEN* was in front with 64 bins followed by *MICLERE* and 67 fulls, with the brake wagon in the rear.

The two track maintenance gangs, based at Marian and Farleigh, were amalgamated late in 2003. The combined gang is now based at Marian, which explains the large collection of maintenance locomotives and equipment assembled in the yard there in January.

The second of two former Racecourse Mill EM Baldwin 4wDH locomotives sold at the disposal auction in November 2003, *LEO* (6/2612.1 10.68 of 1968) was observed at Mackay Tender Center in early June and was still present on 26 June. *ROAD RUNNER* (6/2612.2 11.68 of 1968) was reportedly sold through the Center in April.

Tony Wells 5/04, 6/04; David Phillips 5/04; Mackay Sugar/Transfield One Talk 11/03 & 4/04; Tom Badger 6/04; Editor 1/04, 6/04

MINE & QUARRY EQUIPMENT PTY LTD, Wacol

(see LR 168 p.22)

610mm gauge

A liquidation auction was held on 3 June. Items offered included 5 boggers and three new 2ft gauge mining skips. Purchased by Raymond Mewes of Algester was the ex-Goondi Mill 2ft gauge 2½ ton Motor Rail "Simplex" 4wDM that had been here for a number of years. Previously thought to have been Motor Rail 2117 of 1923, further investigation shows that it is almost certainly 3688 of 1924, with 2117 being the one acquired recently from the Goondi Mill site by Roger Anderson (see LR 177 p.19).

http://www.graysonline.com.au; David Mewes 6/04; Editor

PROSERPINE CO-OPERATIVE SUGAR MILLING ASSOCIATION LTD

(see LR 177 p.21)

610mm gauge

EM Baldwin B-B DH 9 (6626.1 7.76 of 1976) returned to the mill on 21 June after rebuilding by On Trak Engineering Pty Ltd, Marayla, NSW. 10 (9816.1 10.81 of 1981) arrived on 3 July. They have received painted slogans, '*The Diesel Dog*' and '*The Barley Girl*' respectively.

Number 9 looked very attractive on arrival with a very nice shiny new paint job, in basically the same colour scheme as before and with plenty of chrome / stainless steel / galvanised fittings. There are no major changes in external appearance, but minor alterations in the mesh of the radiator and cowling grilles, and slightly different steps. Replacement EMB plates have been fixed to the cab sides, there are genuine 'Baldwin' stickers on the rear of the cab, and a new 'Ontrak Engineering' plate on the front above the radiator grille.

It is understood that the two EM Baldwin locomotives obtained from Fiji will be stored at Marayla until funds become available for rebuilding.

Carl Millington 5/04; Tom Badger 6/04, 7/04

TULLY SUGAR LTD

(see LR 176 p.21)

610mm gauge

Most of the locomotives now carry their number following '*TULLY-*' in large lettering, making identification much easier.

Newly arrived Walkers B-B DH *TULLY-8* (606 of 1969, rebuilt Bundaberg Foundry Engineers DH24, 2004) was noted being fitted out in the loco shed on 22 June. This 36-tonne locomotive was due to enter service in the second half of July and carries a Bundaberg Foundry Engineers / Walkers rebuild plate. It still has a Caterpillar 6-cylinder motor of the type originally fitted to this unit as a Queensland Railways DH class. The mill is reportedly quite happy with these engines and will stick with them. Once 8 is commissioned, it is believed that Walkers B-B DH *TULLY-6* (653 of 1970, rebuilt Walkers 1993) will receive a reconditioned engine and Com-Eng 0-6-0DH locomotives *TULLY-17* (AH42100 of 1966) and *TULLY No.18* (A060113 of 1977) will be fitted up as a multiple-unit pair, the last of these locomotives to be so adapted.

Walkers B-B DH *TULLY-5* (650 of 1969 rebuilt Walkers 1993) was noted derailed at Hill 60 Road, Jaffa, on the morning of 28 June. Hauling a rake of empties it had been diverted in error into a siding and failed to pull up before the end of the line. It was towed back to the mill on the night of 29-30 June.

Stored in a shed in the navy area at the mill are the two ex QR Walkers B-B DH locomotives obtained for rebuilding. DH36 (618 of 1969) is dismantled and without bogies. CC03 (643 of 1970) is on 900mm gauge bogies sitting atop 600mm gauge shop bogies.

Chris Hart 6/04; Editor 6/04

WESTERN AUSTRALIA

BHP BILLITON

(see LR 177 p.21)

1435mm gauge

The third batch of second-hand GM EMD Co-Co DE Model SD40 locomotives arrived in port on 8 June. There are six of them and they arrived overhauled and repainted in the new BHP Iron Ore livery, possibly making identification a challenge. They are numbered 3086 to 3101 and some at least were placed into service as helper units within a few days of unloading. It is thought that they include ex Southern Pacific RR 7333 (31564 of 1966) and 7349 (33679 of 1968).

GM EMD Co-Co DE 3079 (31542 of 1966) had its repaired engine fitted by early June. It was sighted on 11 June in front of the Overhaul Shop fitted with an air conditioning unit and was expected to commence yard duties in the following few days.

Photographic evidence seems to point to GM EMD Co-Co DE 3081 being former Union Pacific RR 3373, making it builder's number 766056-39 of 1977.

Richard Montgomery 6/04; Jim Bisdee 6/04

LOCOMOTIVE, ROLLING STOCK & EQUIPMENT MANUFACTURERS

BISHOP AUSTRANS LTD, Chullora, NSW

750mm gauge

Not really an industrial railway but interesting anyway is the demonstration people mover that has been built at the old Chullora railway yards. Operating on 750mm gauge track on "Z" section rail, and with a patent grip wheel allowing 20% gradients to be climbed, small third-rail electric driverless passenger cars operating at high frequency are claimed to offer a new cost-efficient mass transport system.

Illawarra Mercury 8/5/04 & *Inner West Courier* 10/5/04 via Len King; http://www.austrans.com/

A selection of books from the LRRSA Sales Department ...

Built by Baldwin

The Story of E. M. Baldwin & Sons, Castle Hill, NSW - by Craig Wilson

The history of Australia's most successful and innovative builder of industrial diesel locomotives. E. M. Baldwin developed the B-B DH locomotive now widely used on Queensland's sugar railways, 160 pages, A4 size, 148 photos, 16 diagrams, construction listing.

$44.00 Hard cover (LRRSA members $33.00) Weight 1000 gm.

The Aramac Tramway

By Peter Bell & John Kerr

The history of the 41 mile long 3 ft 6 in gauge Aramac Tramway, almost in the centre of Queensland. Built in 1913, it operated for 62 years, providing the Shire Council a major challenge to keep it going.

48 pages, A4 size, 49 photos, 5 maps and plans, references, bibliography and index.

$15.00 Soft cover (LRRSA members $11.25) Weight 350 gm.

Focus on Victoria's Narrow Gauge Beech Forest Line Part 1

Photographs by Edward A.Downs, published by Puffing Billy Preservation Society. Very high-quality landscape format book of duotone photographs dating from 1930s, but mostly from the 1940s. 48 pages, soft cover, A4 size.

$35.95 (LRRSA members $32.35) Weight 280 gm

Echoes through the Tall Timber

The Life and Times of a Steam Man 1895-1984 by Dorothy Owen, published by Brunel Gooch Publications. Life story of Harry Matheson, who drove logging winches, and mill engines in the Warburton-Powelltown area. 176 pages, soft cover, A5 size, 48 illustrations.

$22.95 (LRRSA members $20.66) Weight 375 gm

Focus on Victoria's Narrow Gauge Gembrook Line Part 1

Photographs by Edward A.Downs, published by Puffing Billy Preservation Society. Very high-quality landscape format book of duotone photographs from the mid-1930s to the mid 1940s. 48 pages, soft cover, A4 size.

$35.95 (LRRSA members $32.35) Weight 280 gm

Powelltown

A History of its Timber Mills and Tramways by Frank Stamford, Ted Stuckey, and Geoff Maynard. 150 pages, soft cover, A4 size, 150 photographs, 22 maps and diagrams, references and index.

$22.00 (LRRSA members $16.50) Weight 550 gm.

The Innisfail Tramway

The History and Development of the Geraldton Shire Tramway and the Mourilyan Harbour Tramway by John Armstrong & G.H. Verhoeven. 128 pages, A4 size, 99 photos, 22 maps/diagrams.

$37.90 Hard cover (LRRSA members $28.43) Weight 650 gm.

$29.95 Soft cover (LRRSA members $22.46) Weight 470 gm.

Modernising Underground Coal Haulage

BHP Newcastle Collieries' Electric Railways by Ross Mainwaring. 60 pages, soft cover, A4 size, 18 photographs, 13 maps and diagrams, references and index.

$16.50 (LRRSA members $12.38) Weight 230 gm.

Laheys' Canungra Tramway

by Robert K. Morgan, revised by Frank Stamford Describes Queensland's largest timber tramway. 32 pages plus soft cover, A4 size, 28 photographs, plus maps/diagrams and index.

$9.95 (LRRSA members $7.46) Weight 220 gm.

Mountains of Ash

A History of the Sawmills and Tramways of Warburton - by Mike McCarthy

Describes a network of over 320 km of tramways which linked 66 major mills to the Warburton railway. 320 pages, A4 size, 280 photos, (incl. 52 duotones), 50 maps/diagrams, (incl. 14 four-colour maps).

$59.95 Hard cover (LRRSA members $44.96) Weight 1500 gm.

Settlers and Sawmillers

A History of West Gippsland Tramways and the Industries they Served 1875-1934 by Mike McCarthy

168 pages, soft cover, A4 size, 96 photographs, 17 maps and diagrams, 6 graphs, one loco diagram, references and index.

$31.90 (LRRSA members $23.93) Weight 700 gm.

Bellbrakes, Bullocks & Bushmen

A Sawmilling and Tramway History of Gembrook 1885-1985 - by Mike McCarthy

104 pages, soft cover, A4 size, 71 photographs, 17 maps and diagrams, references and index.

$26.00 (LRRSA members $19.50). Weight 500 gm.

John Moffat of Irvinebank

A Biography of a Regional Enrepreneur, by Ruth Kerr

Published by J.D. & R.S. Kerr

296 pages, 243 mm x 172 mm, 3 maps, 47 photographs, references, bibliography and index.

Not a railway history, but a history of an Australian mining magnate who was very much involved with associated railways and tramways in North Queensland. He was seen as a "monument to honesty".

$45.00 hard cover (LRRSA members $40.50) Weight 950 gm

$30.00 soft cover (LRRSA members $27.00) Weight 820 gm

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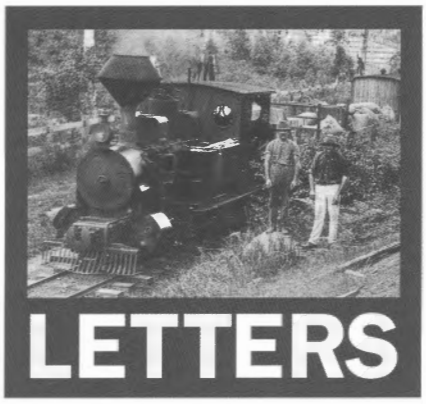


LETTERS

Dear Sir,

Balikpapan
(LR 143, 144, 145, 148, 162, 163)

Ray Graf has recently been loaned a series of photographs believed to have been taken by the uncle of Bob Mills, who was on active service during World War II. These appear to show scenes in Borneo, some at least at Balikpapan, and one is of the 0-4-0T 7 *DIVVIE LIZZIE*, which was pictured in LR 143. There are also different photographs of this locomotive in the collection of the Australian War Memorial (negatives 112754, P00043.003, P00630.048, P00630.049). On the smokebox saddle of the locomotive is painted **7** DIV W/S A.E.M.E., which as has been explained by John Peterson, is the 7th Division Workshops, Australian Electrical & Mechanical Engineers.

This locomotive appears to be German-built, and as implied by Ray Gardiner, I suspect it may have been a Henschel product. Ten 1000mm 0-4-0T locomotives are listed as supplied by Henschel between 1912 and 1926 to the company that was to become Royal Dutch Shell, Bataafsche Petroleum Maatschappij, who operated the Balikpapan site. A rectangular builder's plate can be seen on the tank below the name. The photograph also shows a wrecked locomotive cab (possibly from a Deutz diesel) in the background.

John Browning
Rockhampton, Q

Dear Sir,

"The Railways of Hebburn" (LR 177)

I refer to the article "The Railways of Hebburn" in *Light Railways* 177. Unfortunately, it appears the author has "recycled" information contained in the late Giff Eardley's, *The Railways of the South Maitland Coalfields*, and in doing so, has faithfully repeated the errors contained therein.

No mention was made of the use of Richmond Vale Railway's No.9 *PELAW MAIN* on the Hebburn Branch during the latter part of 1969, while 3013 was undergoing repairs, and again, the 'myth' that 3013 was purchased by Hebburn is further perpetuated.

For the record, 3013 was purchased by the Richmond Vale Railway from the New South Government Railway Department to replace already on hire No.26 and was NOT purchased by Hebburn. No.26 was hired to Hebburn Ltd as a 'stop gap measure' until No.9 *PELAW MAIN* could be released from Hexham. It was intended to overhaul ROD 22 and when returned to service, No.9 was to be released and hired to Hebburn to replace No.26. Unfortunately, No.26 was withdrawn for repairs on so many occasions before ROD 22 was overhauled, that it was decided to purchase a replacement locomotive and cancel the repairs to ROD 22 and leave No. 9 at Hexham. The only suitable locomotive the NSWGR had available for sale was 3013. This loco had to undergo two important modifications before being allowed to work on the Hebburn Branch under Department of Labour & Industry Regulations.

Firstly, the locomotive had to be fitted with an extra gauge glass as, in Government service, the locomotive had only one gauge glass fitted. The other was that the locomotive was converted to steam brake operation, as the air receivers fitted on 3013 did not conform to then current Standards Association of Australia (SAA) requirement for Pressure Vessels.

Later, due to increased use of Government air braked wagons on Hebburn traffic, it was decided to fit air brakes for use on the train. The air receivers fitted to the withdrawn Robert Stephenson & Hawthorn locomotive conformed to the then current SAA requirements and accordingly were fitted to the buffer beam of 3013.

Interestingly, No.26 was actually part RVR/part Hebburn loco as, in 1954, it was fitted with a boiler taken from a withdrawn Hebburn '20 class' locomotive. The boiler was purchased by J&A Brown & Abermain Seaham Collieries Ltd from Hebburn Ltd and fitted to the locomotive at the Hexham Workshops.

When Hebburn Ltd bought the Robert Stephenson & Hawthorn locomotive, they received a set of detail drawings which indicates that the Hebburn loco was made basically from 'standardised' parts. The author states that the Stephenson & Hawthorn locomotive "*tipped the scales at 75 tons 2 cwt*". The outline arrangement drawing of the locomotive in Hebburn records, gives the "approx. Total Weight" to be 51 tons 8cwt 3qrs, some 23½ tons lighter than stated!

Brian Andrews
Killingworth, NSW

0-4-0T 7 DIVVIE LIZZIE, *seen at Balikpapan during World War II. Photo: Bob Mills collection*

Dear Sir

Douglas Shire Tramway

When I was in Manchester in about 1992, I visited GEC Traction's Metrovick Works at Trafford Park and copied a lot of railway and tramway pictures. One such was a United Electric Car Co, Preston, view of about 1907 of a bogie toastrack tramway type car, on typical steam tramway type plate frame bogies (as also used by the Manx Electric Railway and the Blackpool & Fleetwood Tramroad). It had striped side curtains, was obviously of about 2'0" gauge and was noted as 'for Australia".

I have recently been browsing through the massive photograph albums that belonged to Richard Warren of Perth, and found photos of his of the Port Douglas composite brake/toast rack passenger car 'preserved' in a sea-front park at Port Douglas as at 17 August 1966. Although the body looks pretty home-made, it is peculiar in that the ends are slightly curved, and closer examination shows it was on British tramway-style plate frame bogies. Comparison of this with the United Electric Car shows that it has an identical chassis (down to the last rivet), steps, bogies, couplers and roof. In other words the one at Port Douglas was the same, or a sister car, but much rebuilt.

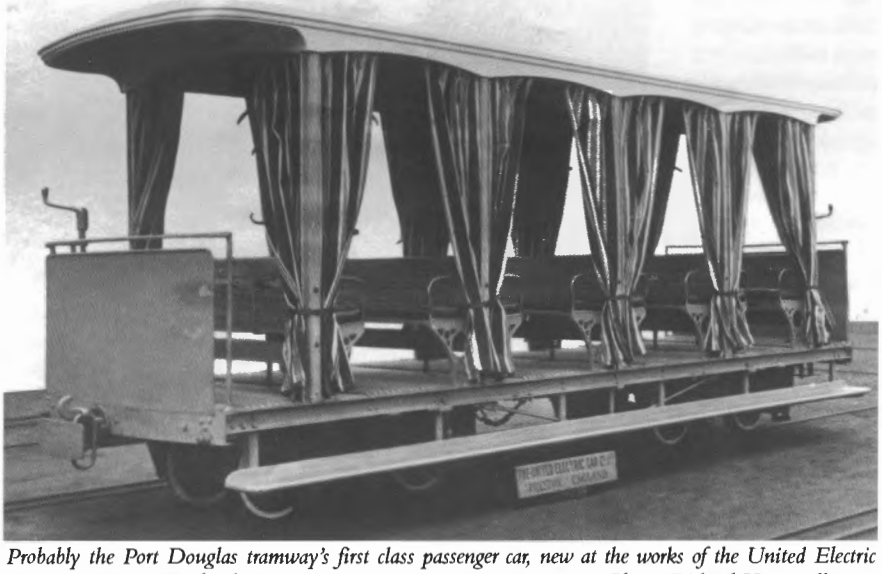
John Browning has passed on a few notes about this vehicle from material gathered by the late John Kerr.

1907: *The new first class car for the Port Douglas-Mossman tramway is expected in a few weeks time. "It is more than possible that the lordly Japanese will try and utilise it. They are the flashest individuals travelling around at present. Most others would like a fourth-class car or a truck if a reduced fare could be obtained."* (Townsville Daily Bulletin, 16 December 1907, p.2)

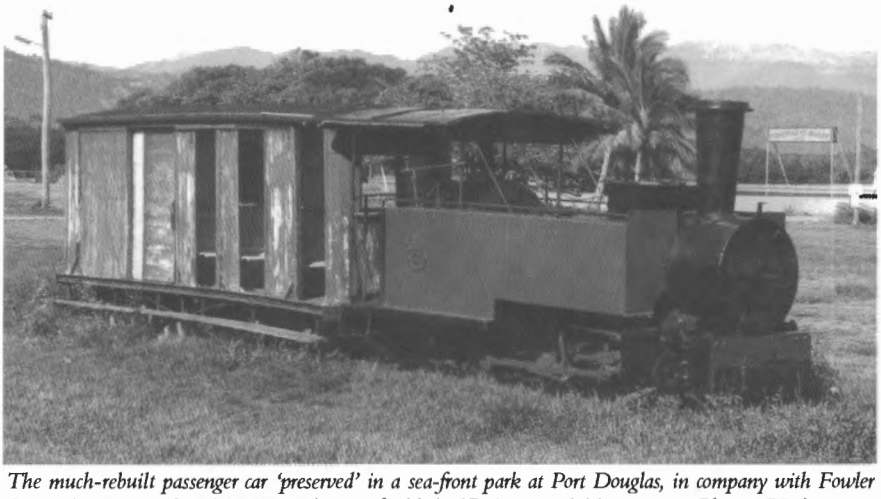
1909: *The Shire's line is well equipped with rolling stock; the long open first class carriage is especially comfortable with ample opportunity for observation.* (Australian Sugar Journal, July 1909)

1930: *The "Port Douglas Express" is a wonderful train. Drawn by a puffing little locomotive, it covers the 14 miles from Mossman to Port Douglas at a speed equal to that of any mixed train in the north. The carriages are weird relics of a bygone age. Despite their age, I found the first class carriage, a tram-like compartment, infinitely more comfortable to ride in than are many of the first class carriages running on some of the Northern Railway lines. It felt safe. There was no body sway.* (Queenslander, 23 January 1930).

Richard Horne
Croydon, England



Probably the Port Douglas tramway's first class passenger car, new at the works of the United Electric Car Co, Preston, England, circa 1907. *Photo: Richard Horne collection*



The much-rebuilt passenger car 'preserved' in a sea-front park at Port Douglas, in company with Fowler 0-6-0T FAUGH-A-BALLAGH *(8733 of 1901), 17 August 1966..* *Photo: GLC Rogers*

LRRSA NEWS

MEETINGS

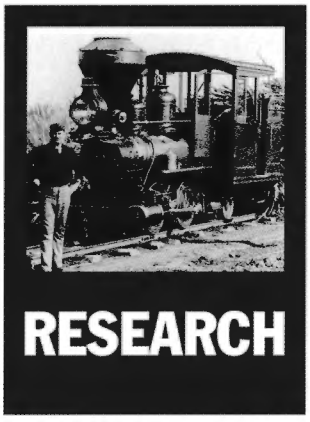
ADELAIDE: "James Martin & Company"
There will be a discussion on the subject of South Australian locomotive builder James Martin & Company which from 1890 until its takeover, by Perry Engineering, in 1915 built 233 locomotives for railways in South Australia, Western Australia, New South Wales, Tasmania and Queensland.
Location: 150 First Avenue, Royston Park.
Date: Thursday 5 August at 8.00pm.
Contact Arnold Lockyer (08) 8296 9488

BRISBANE: "Indonesian Steam"
Ross Sadler will show video and slides of Indonesian steam in action.
Location: BCC Library, Garden City Shopping Centre, Mount Gravatt. After hours entrance (rear of library) opposite Mega Theatre complex, next to Toys'R'Us.
Date: Friday 13 August at 7.30 pm. Entry from 7 pm. Contact Bob Dow (07) 3375 1475

HOBART: "Harbour Tramways"
Ken Milbourne will be presenting an item on the role played by tramways in harbour construction in Tasmania.
Location: Transport Museum, Anfield St. Glenorchy.
Date: Friday 24 September 2004 at 7.30 pm

MELBOURNE: "Annual General Meeting and Slide Show"
After the usual brief AGM the traditional members' slide show will be held.
Bring along a choice of your collection. However, this year you can alternatively bring a CD-ROM with a short "Power Point" or "Adobe Acrobat" presentation if you wish!
Location: Ashburton Uniting Church Hall, Ashburn Grove, Ashburton.
Date: Thursday 12 August at 8.00 pm

SYDNEY: "Narrow Gauge & Industrial Railways in the Hornsby Shire"
Michael Bickford will talk about various industrial railway operations he has discovered that once existed in the Hornsby Shire area.
Location: Woodstock Community Centre, Church Street, Burwood, (five minutes walk from Burwood railway station).
Date: Wednesday 25 August at 7.30pm.



RESEARCH

Industrial Railway Society

The Industrial Railway Society, which is the largest historic, English language group devoted to its area of study, has decided to do two separate things that are of use to all those with an interest in the logging, mining, and industrial processing or manufacturing railway lines around the world.

They have put the index to the first 14 volumes of the *Industrial Railway Record* on-line as a printout. They also have decided to start placing the early copies of all the out of print editions, as downloadable printouts on line. They will not place later copies, for which purchasable paper editions exist, on line.

While primarily, concerned with the United Kingdom, the IRS has covered the globe over the years pursuing all the places where 'critters' (both great and small) have toiled. They have produced notable books on industrial lines in many countries. They are at: < http://www.irsociety.co.uk/ >

This is a very commendable activity, for the indexes, which will eventually cover all volumes of the IRR, that will allow you to determine whether or not material pertinent to your research has been published in the IRR.

Peter Boylan, IRS library holding, via John Martin, LocoShed E-Group, 31 May 2004

Broome Jetty Tramways

Ian Crellin and Frank Stamford did a sterling service for the LRRSA when they visited the various jetty tramway systems of North West Western Australia in the early 1970s and documented their findings in *Light Railways*. The network operated by the Public Works Department at Broome was covered in LR 56, the Winter 1976 issue. Steam traction was introduced in 1910 in the form of O&K 0-4-0T 4058 of 1910, being replaced by the 0-4-0T *KIMBERLEY* (Andrew Barclay 1754/1922) in 1922 or 1923. Fordson tractors and two Simplex 4wDM locomotives were also used on the line. Bill Hanks visited Broome in March and traced the remains of the tramway system. His report follows.

Little remains of the old Mangrove Point jetty built in 1896 upon which a 2ft gauge horse hauled railway operated. By 1910 the railway had been converted to 3ft 6in gauge for steam operation, as it was a vital transport link between the deep-water jetty and the main town, two kilometres to the north. This jetty was used until replaced in 1966 with a more modern jetty that ran out into deeper water close to the mouth of Roebuck Bay. The railway on the old jetty remained in use until the end, but only as far as the goods yards. The approach embankment to the old jetty remains as a break wall and is about 100 metres in length.

Leaving the embankment, the railway turned right, past the old settlers cemetery, through a shallow cutting about 50 metres long, before entering the goods yard. The stone loading ramps and foundations for two sheds were located on this site. Also found were the remains of a goods wagon, a crossing for a set of points, plus other pieces of ironmongery. Beyond the goods yard heading north to centre of town, there are no identifiable remains of the railway as the entire route was along the centre of roads, which have been sealed over for a long time.

From photos in the Broome Museum, I was able to get some idea of the track layout of the goods yard and others locations on the railway. At one stage there appears to have been a siding off the mainline into the grounds of the Anglican Church. The one photo I saw lead me to believe that this was 2ft gauge and therefore quite early. Other photos show trains at the siding in Dampier Terrace, which serviced the Streeters Jetty area and its stores. A number of photos seen whilst primarily of buildings or people in the Chinatown area have railway tracks in the foreground. It would appear that trains stopped to pick-up or put-down people and goods anywhere they needed in the Chinatown area, including the historic Sun Pictures open air theatre.

It was previously believed that a branch line existed from near the jetty to the old meat works, but this was not the case. There was a cattle race from the meat works that ran onto the jetty and continued nearly to its end, that one could have imagined being a railway from some photos and maps.

Bill Hanks

From 1896 until 1910, a horse powered 2ft gauge railway operated between the old Mangrove Point jetty and the township of Broome, WA.
Photo: WA Government Printing Office

Coming Events

AUGUST 2004

15 Cobdogla Irrigation Museum, SA. Open day with narrow gauge steam train rides and heritage engines. Phone (08) 8588 2323.

8-25 Semaphore & Fort Granville Steam Railway, SA. Miniature steam strains operate daily. Information: (08) 8341 1690.

SEPTEMBER 2004

5 Cobdogla Irrigation Museum, SA. Open day with narrow gauge steam train rides and heritage engines. Phone (08) 8588 2323.

5 Wee Georgie Wood Railway, Tullah, TAS. 610mm gauge steam train operations, 0930-1600 – also on 12 and 26 September. Phone (03) 6473 2228 or 6473 1229 (AH).

11 Bennett Brook Railway, Whiteman Park, WA. Prospective Members' Open Day with tours of the railway and presentations on its operations. Contact Bob Baker on (08) 9534 5814 or E-mail info@bennettbrookrailway.org

OCTOBER 2004

2 Bennett Brook Railway, Whiteman Park, WA. *Friends of Thomas the Tank Engine* Day with the Fat Controller and narrow gauge steam and diesel trains. Information: (08) 9439 2821.

3 Wee Georgie Wood Railway, Tullah, TAS. 610mm gauge steam train operations, 0930-1600 – also on 24 October. Phone (03) 6473 2228 or (03) 6473 1229 (AH)

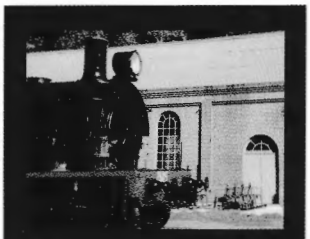
2-3 Puffing Billy Railway, Gembrook, VIC. Day Out with Thomas – a family attraction at Emerald town. Also on 9-10 and 23-24 May. For information, phone (03) 9754 6800.

4 Cobdogla Irrigation Museum, SA. Open day with Humphrey Pump, narrow gauge steam train rides and heritage engines. Phone (08) 8588 2323.

16-17 Cambbelltown Steam Museum, Menangle, NSW. Oil, Steam & Kerosene Days with narrow gauge steam and diesel trains, traction engines, steam rollers and vintage machinery. Phone (02) 4626 3500; E-mail: big-trev@bigpond.com.

17 Puffing Billy Railway, Gembrook, VIC. Kids Fun Run with Thomas. For information, phone (03) 9754 6800.

NOTE: Please send information on coming events to Bob McKillop – rfmckillop@bigpond.com - or The Editor, *Light Railways,* PO Box 674, St Ives NSW 2075.



Heritage &Tourist

News items should be sent to the Editor, Bob McKillop, Facsimile (02) 9958 8687 or by mail to PO Box 674, St Ives NSW 2075.
Email address for H&T reports is: rfmckillop@bigpond.com
Digital photographs for possible inclusion in *Light Railways* should be sent direct to Bruce Belbin at: boxcargraphics@optusnet.com.au

NEWS

Queensland

CAIRNS KURANDA STEAM RAILWAY 1067mm gauge
This private operator commenced a steam-hauled tourist train operation to Kuranda in March 2004. Ex-Emu Bay Railway B-B DH 1101 (Walkers 638/1970) is used in push-pull configuration with ex-South African Railways 24-class 2-8-4 No. 3620 (renumbered 0401 for Queensland service). CKSR has also purchased ex-Emu Bay Railway B-B DH 1102 (Walkers 639/1970). In early June this unit was undergoing extensive overhaul in Tasmania prior to being shipped to Cairns. The work includes conversion to air braking, the fitting of new transmission and re-profiling the wheels to Queensland standards.
Melanie Dennis, LocoShed E-Group, 06/04

DURUNDUR RAILWAY, Woodford
610mm gauge
Aust. Narrow Gauge Railway Museum Soc. Inc.
Train operations remain suspended, although the Woodford site is open on Sundays with static displays. Activities have concentrated on relocating the main line. Work on spiking the rails to sleepers and re-timbering new points opposite the workshop continued through April. Major work parties are scheduled for the second Saturday of the month through 2004. During April, ANGRMS volunteers joined with representatives of other narrow gauge preservation groups to salvage obsolete 2ft gauge equipment, primarily bogies, from the old Goondi Mill site near Innisfail. Some 44-tonnes of equipment was scheduled to arrive at Woodford during May.
Durundur Railway Bulletin, No. 273, May 04

QUEENSLAND RAIL HERITAGE
This Web site features over 30 rail-orientated groups – preserved railways, museums, libraries, model railway groups, tour operators and specific heritage sites – who are active in preserving Queensland's railway heritage. Organised by regions, it provides up-to-date information and links to organisations, collections and sites. Some information appears to be out of date, but through the site, I learned that the former Bundaberg Botanical Gardens Railway is now known as the Australian Sugar Cane Railway. The link to its site provides interesting photographs of the restoration of 0-6-2T *INVICTA* (JF 11277/1907 – see LR 173, p.27). The address is: www.QldRailHeritage.com/.
Editor, 06/04

New South Wales

MENANGLE NARROW GAUGE RAILWAY 610mm gauge
Campbelltown Steam Museum
A visit to the Open Day and Steam Rally on 16 May found nine locomotives on display as follows:
John Fowler 0-6-0 DM 16830, "The Black Machine" ex-Childers, Goondi and Condong Mills, then Forresters Beach. Not operational, as work to return it to working order continues after fire/vandal damage some years ago. Although the 5-cylinder Gardner diesel engine has been overhauled, it does not line up with the gearbox and it will have to be lifted out and re-installed.
John Fowler 0-4-0 DM 18801, ex-Plane Creek Mill: in operation, but still needing additional work (LR 176, p.30). As the cab is too wide to fit alongside the passenger platform, it spent most of the day in the run-around road after some morning shunting. The kerosene engine was replaced with a 4-cylinder GM diesel in 1951. Painted green with red and black lining.
Malcolm Moore 4wDM 1043, ex-Australian Army. Numbered L12 on the railway's roster, this unit is undergoing restoration work and has no cab or canopy. It spent the day parked on the little turntable located at the northern end of the line just past the platform.
Motor Rail 4wDM 11023. Simplex 6-tonne loco ex-Condong Mill and Forresters Beach, known as "The Red Diesel". This unit was used to shunt the 0-6-0 Fowler and the "Green Machine" around the shed. It is fitted with 3-cylinder Dorman Diesel engine.
Motor Rail 4wDM 20560. Simplex 3½-tonne ex-MSB (Diesel Loco No.2), which arrived in October 2003 (LR 176, p.29). Numbered L16 on the railway's roster, this loco spent the day coupled to the two Gemco units (see below) outside the shed.
Robert Hudson 0-4-0ST 1423 of 1922, ex-Maria Island Cement Works and Corrimal Coal & Coke. Operational as the main passenger locomotive on the day - painted black. The loco was used to haul two purpose built, wooden-bodied passenger cars down to the end of the line (that rings the property) and then push them back to the platform. Literature on site stated the loco was purchased in 1967.
Two Gemco 4wBE locomotives, ex-Hillgrove, New England Antimony Mines. One was used to shunt the other, and the ex MSB Simplex on the day.
The 'Green Machine', a Baguley 4wDM, almost certainly built in 1949 for Railway Mine & Plantation Equipment Co Ltd. The locomotive, which "retrieved from the basement of a Sydney technical college", was fitted with an exhaust conditioner, so it was presumably used in a gassy mine, or an armaments or explosives plant. This loco spent the day in the shed.
The staff onsite were most gracious in allowing visitors to photograph the collection, and to ask questions (and even arrange where to park the locos). Amongst other rolling stock the museum has a number of wooden yellow flatcars numbered F11, F44, 49, 51, 53, 54, 55 and three unidentified flatcars.
Chris Walters & Brad Peadon 05/04; John Browning 05/04

RICHMOND VALE RAILWAY, Kurri Kurri 1435mm gauge
Richmond Vale Preservation Cooperative Society Ltd
The annual *Coalfields Steam* weekend was held on 12-13 June. Operational steam locomotives ex-SMR 2-8-2T No.30 (BP 6294 of 1925) and 0-4-0ST *MARJORIE* (Clyde 462/1938) hauled passenger trains to Pelaw Main and Mulbring Road respectively. The highlight of both days was the running behind No.30 of a rake of non-air coal wagons between Richmond Main and Pelaw Main Collieries. Former BHP Bo-Bo DE No.34 hauled the passenger train prior to the non-air train and set down photographers to enable them to get a shot of the coal train out on the line. The other attractions included a steam traction engine running around the museum grounds and a steam portable engine operating a pump.
Jeff Mullier, 06/04

SCENIC WORLD, Katoomba
762mm gauge?
Several readers have provided promotional material on this upgraded tourist icon, which comprises the Katoomba Scenic Railway, the Scenic Skyway, a replica of the original scenic railway funicular car, the Katoomba Coal Mine Exhibition and a boardwalk. The coal mine exhibition, located a few minutes walk from the bottom platform of the Scenic Railway, features a high-tech presentation on a large screen, figures of a miner explaining the history of the mine to his grandson and skips on rail track. A miner mannequin with a pit pony hauling skips and a replica of the tippler has been constructed where coal was transferred from mine skips into skips on the incline for haulage up the escarpment. The newest attraction is the Furnace Tunnel, used to ventilate the mine between 1880 and 1895. A first-hand report of a visit to this site would be appreciated.
Editor, 06/04

Victoria

ALEXANDRA TIMBER TRAMWAY & MUSEUM
610mm gauge
The museum had a successful Easter weekend on 10-12 April with fine and warm weather generating a hive of activity, particularly on Easter Sunday. Volunteers prepared the various exhibits on Easter Friday, including the 1911 Bartram boiler and portable engine and the Marshall portable. The 0-6-0T (J Fowler 11185 of 1909) operated passenger trains over most of the weekend, with the ex-Rubicon Timber Coy 0-6-0DM (Kelly & Lewis 4271/1935) substituting while the Fowler's bunker

Heritage & Tourist

was restocked. Unfortunately, the Kelly & Lewis developed an oil feed problem with the front left hand bearing on Saturday afternoon and it was soon retired from active duty. With fewer visitors on Easter Monday, Malcolm Moore 4wPM (1015/1944) was used for the last few passenger runs. There were 797 passengers over the three days, the highest numbers since 2000. Good souvenir and refreshment sales were also achieved, so the Easter activities contributed to the Society's improved revenue during the first half of 2004. Restoration work on the 0-6-0 (Hudswell Clarke 1098 of 1915) resumed on 24 April after a period of inactivity. The inside axle section of the frame was prepared for final painting.

Timberline 78, June 2004

PUFFING BILLY RAILWAY
762mm gauge
Emerald Tourist Railway Board
The 'Great Train Race' on 2 May 2004 drew a record 2660 runners to try their luck against an 18-carriage train hauled by newly restored Beyer Garratt G42. Good progress has been made on construction of the locomotive workshops extension at Belgrave, with the steelwork being erected early in May and much of the carpentry, roofing and plumbing finished by the end of the month. The project is running ahead of schedule and the extension is scheduled for completion in early July 2004.
PBR Newsletter, June & July 2004

Tasmania

BUSH MILL RAILWAY,
Port Arthur 381mm gauge
Bush Mill Steam Railway & Settlement
Further to our LR 177 report (p.28), Alistair and Catherine Matheson, the owners of the Bush Mill tourist complex, announced on 2 June that the operation would close after 25 years of operation. They stated that after four years on the market, a suitable buyer had not been found. The difficulties of insurance and accreditation faced by railway and machinery operators in recent years and competition from larger government-backed operators such as the West Coast Wilderness Railway were blamed for the closure. The railway equipment, including the famous K1 Garratt replica locomotive and the 0-4-0T+T *MOUNTAINEER*, and the bush mill equipment will be sold, while eight casual employees have been forced to move on.
The Mercury, 3 June 2004, via Barry Blair and David Burke

IDA BAY RAILWAY
610mm gauge
Trans-Derwent Ferry & Railway Company
Peter Fell announced on 7 June 2004 that his Ida Bay Railway (see LR 157, pp.3-8), comprising three locomotives, four carriages and all equipment, would be sold. In his media statement, Mr Fell lashed out at the lack of support for small businesses such as his operations and claimed that the Tasmanian Government had failed to provide compensation for a fire in a State Reserve that burned his tracks four years ago. He said that big operators such as the West Coast Wilderness Railway and the Don River Railway had received considerable financial support, but nothing was available for small businesses. Promoted as Australia's southernmost railway, the isolation of the Ida Bay operation has proved a major obstacle to its commercial viability. An update on the sale would be appreciated.
The Mercury, 7 June 2004, via Barry Blair

REDWATER CREEK, Sheffield
610mm gauge
Redwater Creek Steam & Heritage Society Inc.
SteamFest 2004 was held from 6-8 March with the 2ft gauge steam train again providing the main attraction. This comprised composite Krauss 0-4-0WT (5682/1906 and 5800/1907), the ex-Boulder tramway green passenger carriage PB1, the ex-NE Dundas Tramway red carriage A1 and guards van DB1. Other items on display included steam traction engines and road rollers, a Sentinel steam wagon, an 1886 steam-powered Carousel, steam-driven chaff cutters, threshing machines and straw balers, vintage tractors, horse-drawn coaches and wagons, historical petrol and diesel engines and a display of antique kerosene lamps.
Ray Graf, 05/04; RCSHS Web Page

South Australia

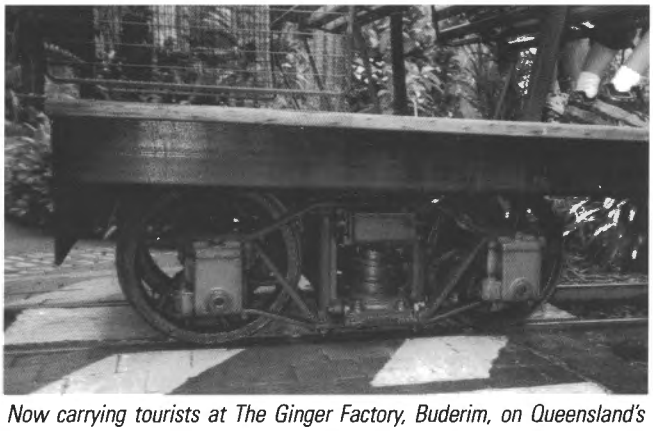
COBDOGLA IRRIGATION MUSEUM 610mm gauge
Cobdogla Steam Friends Inc.
The Society is establishing a new locomotive and carriage shed, which will include a loco servicing pit on one of the tracks. It is envisaged that a triple switch to be constructed on the bottom storage siding will access the new shed. Meanwhile, the new IC-engine shed was nearing completion in early June and additional trackwork was about to commence on the main line to Loveday.
Denis Wasley, 06/04

VICTOR HARBOR TOURIST RAILWAY, Goolwa
1600mm gauge
SteamRanger
Celebrations to mark the 150th anniversary of Australia's first public railway, the horse-worked Goolwa to Port Elliott line were held from 14-16 May 2004. Steam Ranger operated special trains throughout the period. A feature event was the re-enactment of cargo transhipment from river steamers to the railway, its transport to Port Elliot and loading onto ships bound for Adelaide. A load of cargo from Renmark, Loxton and Waikere arrived at the Murray mouth port of Goolwa on 15 May aboard the paddle steamer *Industry*. The cargo was transhipped to rail wagons and hauled to Port Elliot the following morning, where it was loaded onto the tall ship *One and All* by surf boat and transported to Port Adelaide. A replica of the first carriage on the line was on display at Goolwa, where a beam engine imported to Port Elliot in the early 1850s was displayed at the wharf.
ABC Adelaide 16 May via Barry Blair; *Aust. Steam Power* 83, 06/04

Western Australia

BASSENDEAN RAILWAY MUSEUM 1067mm gauge
Australian Railway Historical Society (WA Division)
The 4-wheel rail tractor ST1, powered by a Massey Ferguson engine, formerly on loan at Rottnest Island (LR 151, p.31), was returned to the AHRS site at Bassendean on 2 November 2003. It was unloaded on that day and moved under its own power on the site.
Bob Yate, 06/04, via John Browning

BENNETT BROOK RAILWAY, Whiteman Park 610mm gauge
WA Light Railway Preservation Assoc. Inc.
Starting Tuesday 18 May, the restoration crew re-fitted the wheels on the 0-6-0DM *ROSALIE* (J Fowler 4110019/1950 – see LR 177, p.29). Ron Watson prepared the axle boxes while the crew built up a lifting rig for each axle set. The axles were lifted into place with the Society's crane over two days, with the forklift being used to get the side rods in place. On 20 May the big 50-tonne crane arrived and put the locomotive back on the track. It was ready for the May *Friends of Thomas the Tank Engine* day, which drew a crowd of more than 1200 visitors to the BBR.
WALRPA Membership Officer Rob Baker has initiated a membership drive which includes an open day for prospective members on Saturday 11 September (see *Coming Events*, p.26). Railway managers will be on hand to conduct tours and outline the railway's operation, while a sausage sizzle will be provided.
Restoration of the ex-Whiteman brickworks 4wPM Planet locomotive 'Yellow Rose', is progressing well at the Mussel Pool workshops. It is believed that this loco is derived



Now carrying tourists at The Ginger Factory, Buderim, on Queensland's Sunshine Coast, this elegant old bogie began its career nearly a century ago on the 2ft gauge Burrinjuck tramway in southern NSW. Photo: Peter MacDonald

Light Railways *will cover the construction railways of the Snowy Mountains in forthcoming issues. This locomotive and wagons at Cabramurra provide a link to the the rail heritage of the scheme. We provided a b&w in LR 165, but readers may enjoy a colour version.* *Photo: Alf Atkin*

Malcolm Moore 4wDM 1043 on the turntable during the Campbelltown Steam Museum's Open Day on 16 May. *Photo: Chris Walters*

The highlight of the Richmond Vale Railway's Coalfields Steam *weekend on 12-13 June was the running, behind No.30, of a rake of non-air coal wagons between Richmond Main and Pelaw Main Collieries. Photo: Graham Black*

from FC Hibberd 3428 of 1949, a 10hp Y model, which has been considerably modified over the years. It has been out of commission since being involved in a collision with a tamping machine in 1990.
BBR Web Page, 06/04; *BBR Railway Worker,* June 2004

WYNDHAM PORT 1067mm gauge
East Kimberley Shire Council
The extensive Public Works Department tramway system servicing the Wyndham port and meatworks was covered in LR 59 (pp.12-20) as part of a series by Ian Crellin and Frank Stamford documenting the jetty railways of the North-West of Western Australia. Our last H&T report was in LR 151 (p. 31). A visit by Steve Zvillis on 16-17 May 2004 has updated the rolling stock located there. An extensive static display on two tracks adjacent to the Port Authority offices includes ex-PWD 0-6-0PM NW3 *KAISER* (Ruhrthaler 191 of 1912), 0-6-0ST *PRESTON* (Hudswell Clarke 379 of 1891), 4wDM PW25 (ex-NW15) *LULU* (Com-Eng GB1045 of 1960), a 4-wheel steam crane (Jessop & Appleby Bros. Leicester Eng.), 4-wheel hand-crane and six 4-wheel flatcars. Stored among shipping containers in the main port area was ex-PWD 4wDM PW26 (ex-NW 16) (Com-Eng GB1046 of 1960), which was formerly on display at the Kununurra Child Care Centre, but was brought back to Wyndham a year or two ago. A bogie diesel crane (Herbert Morris, Loughborough, Eng.) was noted outside the port maintenance depot. This information updates and corrects that given in the LR 151 report.
Steve Zvillis, 06/04

PHOENIX PARK, Norseman
John Shoebridge reports on a visit to the gold mining town of Norseman in September 2003. Gold has been the mainstay of the town's economy since 1892 and the Central Norseman Gold Mine remains an active producer. John and his wife did a 'lap of main' and discovered two small open-air museum collections featuring mining memorabilia. One is near the level crossing on the road to the Central Norseman Gold

Mine, the other beside the main road from the coast. The latter is evidently Phoenix Park, opened in 2001 to provide a tribute to the town's mining and prospecting history. Relics and equipment from old mines have been relocated to the park and set out along winding pathways, which are intersected by a restful water feature. Informative signs are located at each item and tell the stories of yesterday. At both sites, underground locomotives, mine cars and loaders are on open and display generally in good order. Most rail items are 457mm gauge equipment from the Central Norseman GM and their presentation and maintenance is one of the few Australian examples of a successful outdoor display of this type. The Norseman Historical Collection, located at the old School of Mines Building in Battery Road, has interesting displays of local memorabilia that focus on household and mining equipment from 1894-1920. It is open Monday, Tuesday, Wednesday, Friday and Saturday from 10.00 am - 4.00 pm during the winter months and from 10.00 am - 5.00 pm in summer.
John Shoebridge 05/04; with notes from John Browning and David Whiteford

PIONEERS PARK, Coolgardie

A visit to this old goldmining centre found that the Coolgardie Goldfields Exhibition in the impressive Mining Registrar's Building is only open Saturdays and Sundays. The locals have established some open-air exhibits across the road in 'Pioneers Park'. Despite the general air of neglect, there were some very interesting historical items on display. The steam-winding engine there has Walschaerts valve motion, the only example of this John has seen in Australia. Also there were the tattered remains of narrow gauge industrial rolling stock items, probably from one of the 2ft gauge firewood tramways. These comprised two firewood trucks and a 'Sheffield' fettlers' hand-trolley, but sadly these were in the last stages of disintegration. Any further information on these items would be much appreciated.
John Shoebridge 05/04

The Bush Mill Railway's 0-4-0T+T MOUNTAINEER *(built in Holland circa 1970) ponders it fate, following the announcement on 2 June that, after 25 years, the entire operation would be closing.* *Photo: Bill Dunn*

Composite Krauss 0-4-0WT (5682/1906 and 5800/1907), ex-NE Dundas Tramway red carriage A1, ex-Boulder tramway green passenger carriage PB1 and guards van DB1 in action at the Redwater Creek, Sheffield, SteamFest 2004, *Sunday 7 March 2004.* *Photo: Ray Graf*

At Cobdogla Irrigation Museum, a start has been made on building a set of triple points to service the two tracks into the new loco shed and the existing storage line.. *Photo: Denis Wasley*

NORSEMAN & COOLGARDIE

Clockwise from right: *A battery-electric locomotive at Phoenix Park, probably one of the Goodman 457mm gauge 14hp units 5232 and 5233 of 1940, delivered new to the Central Norseman Gold Mine.* ❑ *A Greenwood & Batley 457mm gauge 4½hp Trammer battery-electric locomotive at Phoenix Park. Three locomotives of this type were delivered to the Central Norseman Gold Mine in 1939, so it is possibly one of these.* ❑ *A small three-head mining battery in the second park at Norseman with a hand-pushed mine car.* ❑ *This Eimco 12B loader is on display in the second outdoor display area at Norseman.* ❑ *A unique relic, the rare narrow-gauge 'Sheffield' hand trolley in advanced stages of decay at Pioneers Park, Coolgardie. It stands beside parts of a condenser from a local mine.* ❑ *The ragged remains of trucks at Pioneers Park, Coolgardie. Soon this historical item will be lost for ever. All photographs by John Shoebridge.*