



**AUSTRALASIAN
MINING
HISTORY
ASSOCIATION**

**PROCEEDINGS
of the
28th ANNUAL CONFERENCE**



Queueing for the skip down, Sons of Gwalia Mine

“There’s gold in them thar hills”

**Leonora Gwalia, Western Australia
9 – 13 September 2024**

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*Quoted from Mark Twain's 1892 novel *The American Claimant*.

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Taking the skip down underground
Photographer unknown.

Sponsors 28th Annual AMHA Conference



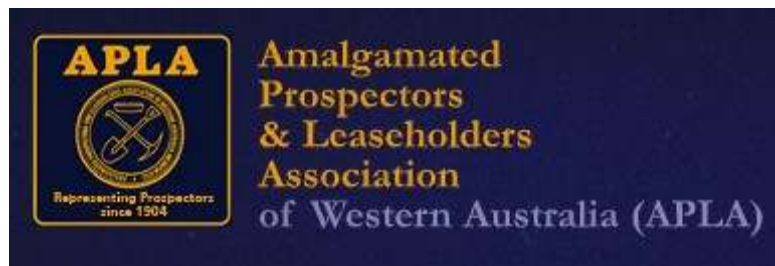
GENESIS
MINERALS LIMITED



**EASTERN GOLDFIELDS
HISTORICAL SOCIETY INC.**
Preserving & promoting Goldfields history



NORTHERN STAR



Message from the President of the Shire of Leonora

On behalf of myself and the residents of the Shire of Leonora, it gives me great pleasure to welcome delegates to the 28th Australian Mining History Association Conference in Leonora's 128th year. Leonora's mining history and that of the surrounding towns and districts, both booming current mines as well as faded ghost towns, is full of amazing stories typical of the mining industry and the people who made and still make it happen. Those who became hugely wealthy, those who perished and those who worked so hard to eke out a living. "There's gold in them thar hills" is so true of both the stories and the minerals and we are fortunate to operate the wonderful museum precinct at Gwalia to retain and display this fascinating heritage. The camp where the miners had to provide their own accommodation, as opposed to the management who were provided with good housing. The "Hoover House", the manager's house commissioned by Hoover and paid for by Bewick Moreing, although Hoover himself left Gwalia before it was finished. The museum itself sitting on top of the deepest trucking mine in the world... and still mining rich gold! Such a fabulous combination.

Despite the current downturn in the nickel price, the mining industry in the Shire of Leonora today is still a great success and we hope this continues for many years to come.

Enjoy the conference

Peter Craig
Shire President



President's Foreword

Leonora and the nearby mining township of Gwalia; have a special place in the mining history of Australia. When the Sons of Gwalia Mine closed in December 1963, the majority of the workforce hurriedly left to seek employment in Kalgoorlie, leaving behind a true ghost town.

The historic significance of Gwalia may well have been destroyed if not for the vision of Don and Donna Reid, who relocated there in 1970 with Western Mining Corporation and recognised the unique character of the township and the importance of its preservation. Supported by the Shire of Leonora and local mining companies and residents, Gwalia Museum was established and part of the township was preserved, offering a unique insight into an earlier era of mining and the lives of those working in the industry.

This conference, the 28th Annual Conference of the AMHA is remarkable in that it brings together many people, including our three keynote speakers, Raleigh Finlayson, Chris Lalor and Susan Close, who have a long association with the mine and the area. Raleigh Finlayson, the CEO of Genesis Minerals, grew up on Jeedamya, a sheep station 80 km south of here and his mother, Kathy - Chris Lalor's sister. worked here at the Leonora Hospital. In 1966, Chris's older brother Jim was the first Western Mining Corporation geologist to locate to Gwalia, to set up an exploration base in the old mine office, following the discovery of nickel at Kambalda. Susan Close is a geologist, consultant, and author with a long association with the area and the gold industry.

The Australian Mining History Association was established 30 years ago when Mel Davies, Honorary Life Member, was elected Secretary and the association was incorporated. The name was subsequently changed to Australasian Mining History Association. Through providing a vehicle for the research, discussion, and preservation of mining history through its Journal, Conferences, Newsletter, Website and Facebook, the AMHA has made a valuable contribution to an understanding and documentation of the history of this critically important industry.

Conferences such as this involve the hard work and support of many people and organisations. I would like to acknowledge the help of Genesis Minerals Limited, Northern Star Resources, the Shire of Leonora, the Leonora Motor Inn and the Eastern Goldfields Historical Society. Thanks to our keynote speakers, Raleigh Finlayson, Chris Lalor and Sandra Close and other contributors to the program and field trips and to Wendy Carter, Conference Convener, on the spot in Leonora, who did most of the hard work in drawing together the program and field visits.

Enjoy the Conference.

Geoff Hudson

President

'In the spirit of reconciliation, the Australasian Mining History Association acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.'

Convenor's Introduction

I was fortunate to live in Kalgoorlie-Boulder from 1989 to 2003 because during that time I became a 'centenary groupie', attending at least eleven centenaries. Coolgardie and Cue in 1992, Kalgoorlie-Boulder, Bulong and Marble Bar in 1993, Sandstone, Kanowna and Lawlers in 1994, and Darlot, Yalgoo and Leonora-Gwalia in 1996.

When visiting Leonora-Gwalia and the amazing camp at the bottom of the hill back in the 1980s, there was so much to find: shopping lists, dolls, prams and hip baths, and all the items of everyday life left behind when the miners and their families left for Kalgoorlie in December 1963, in the hope of finding new jobs. It was so amazing as nearly anywhere else all these mementos of real lives would have long been dozed into oblivion. I didn't know at that stage that Donna Reid had fought to stop the bulldozers doing just that. As well as the centenary in 1996, I also attended the reenactment of the famous Gold Bar Dinner attended by Sir John Forrest in 1899. However, as the dinner menu had too many courses, we reenacted the lunch menu instead!

Despite the sadness of the upset caused to the local Indigenous people whose way of life was changed forever, the centenaries gave me a great taste for the stories and history of the Goldfields. So when I got the chance to move to Leonora-Gwalia in December last year, after over twenty years in the Kimberley, despite the protestations of my friends there who were most doubtful I could make such a move, I jumped at the chance.

I have enjoyed exploring the bush with new friends. I've also enjoyed listening to interesting visitors' stories at the museum and reading as much as I can to improve my knowledge and understanding of the mine, the museum, and the people who have populated them.

I have been amazed at the stories of people from all the different eras of the mining, and from the twin towns of Leonora and Gwalia. I love looking at the old photos and collecting more of them. Donations from old tram tickets, (despite the fact the tram stopped running in 1921!), to heartfelt stories of people who moved here and subsequently left, or those who died here. Not forgetting folk who were born here and still live here!

Now I am looking forward to hearing the papers from all of you who have travelled so far to get here, whether from Dargan near the Blue Mountains, Adelaide, Exeter in Devon in the UK, Melbourne, Tasmania or Anchorage in Alaska. In organising the conference, I realise what a wonderful opportunity it is to learn even more about my new hometown.

Thank you for coming to Leonora-Gwalia!

Wendy Carter – Conference Convenor

Day	Times	Activities and Locations
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Friday	5.30 - 9 pm	Informal dinner and presentations at the Goldfields Repertory Theatre, 7, Brookman Street, Kalgoorlie “Uncovering the Golden Mile” – an illustrated talk by prospector Scott Wilson. “and Cosgrove played the fiddle” - the role of music & theatre in the 1800’s WA Goldfields delivered by Dr. Norma Latchford.
Saturday	7:45 am 8:00 am	Pick-up at the Kalgoorlie Railway Station, Forrest Street. Pick-up at St. Barbara Square, Hannan Street, Kalgoorlie Visits to the Mount Charlotte Reservoir, Museum of the Goldfields for their highlights tour, then the Eastern Goldfields Historical Society (EGHS) for gold-panning and dry-blowing demonstrations & a look at their facility at the Old Boulder Power Station.
	11:30 – 1pm	Lunch at the EGHS
	1 – 3 pm	Afternoon two-hour tour of the Superpit sponsored by Northern Star from 1 – 3 pm.
	3 – 3:30 pm	Afternoon tea & toilet break at the EGHS
	3:30 -5:00 pm	Visit the Boulder Pioneer Cemetery with local guide, historian & prospector Scott Wilson.
	5:30 pm	Drop-offs at St. Barbara Square and at the railway station. For those who have the energy, you can return to the Goldfields Repertory Theatre for tonight’s performance of the Regina Monologues at 7:30 pm!
Sunday	7:45 am 8 am	Pick-up at the Kalgoorlie Railway Station Pick-up at St. Barbara Square Drive to Kanowna for a morning visit with guide Scott Wilson.
		Billy Tea out in the bush provided by members of the the Eastern Goldfields Historical Society.
		Drive back to Kalgoorlie
	12 -1 pm	Lunch at Hammond Park with entertainment by the Goldfields Brass Band
	1 -5 pm	Field trip to the King Battery Site 47 kms south-east of Kalgoorlie with geologist Sandra Close as our guide
	5:30 – 6 pm	Drop-offs at St. Barbara Square & the Kalgoorlie Railway Station.
Monday	7:45 am 8 am	Pick-up at the Kalgoorlie Railway Station Pick-up at St. Barbara Square
	8:15 – 9:15 am	Visit to the Geo Survey Centre of WA & Joe Lord Core Library
	9.30 – 10:30 am	Visit the Two-up ring north of Kalgoorlie with a talk by Danny Sheehan. Then drive north to Menzies.
	11.30 -1 pm	Walk the main street in Menzies & pick up lunch from the café to eat at Niagara Dam
	1 – 5 pm	Visit Kookynie & Margaret Pusey’s Grand Hotel Drive to Leonora
	5:30 pm	Shire welcome at the Community Resource Centre

Schedule of Presentations

Tuesday	8.30-9 am	Registrations
	9 – 9:15 am	Housekeeping from Wendy Carter followed by the Presidential welcome & introductions for the Plenary Sessions from Geoff Hudson.
	9:15 – 10am	Raleigh Finlayson Genesis CEO
	10-10:30	Morning break
	10:30-11:30	Chris Lalor The reopening of the Sons of Gwalia Mine in 1983: observations, 1980-2000
	11.30-12.30	Sandra Close Sons of Gwalia – A Story of Technological Change
Tuesday	12:30 – 1:30	Lunch
	1:30 to 2:10	Patrick Bertola: “ <i>Gwalia through the local Government rates books 1922/23 to 1966/67</i> ”
	2:10 – 2:50 pm	Peter Dillon Launch of the two-volume “ <i>The Complete Story of Gold in Western Australia</i> ”
	2:50-3:20	Afternoon break
	3:20 – 4 pm	Geoff Hudson: “ <i>Don & Donna Reid – Documenting Mining History</i> ”
	4 pm –6 pm 6 – 8:30 pm	Visit the Gwalia Museum & Hoover House BBQ & film night. Documentaries on the effect of gold mining on Indigenous people of the Goldfields & on the removal & restoration of the Hill 50 Winder in the Mt Magnet Museum.
Wednesday	8:45 – 9 am	Update on the Cobar Miners Memorial by Gordon or Evelyn Boyce
	9 -9.30 am	Patrick Bertola “ <i>Australian regulation & controls on gold</i> ”
	9.30-10.00	Nic Haygarth “The Mount Lyell Picnic 1897 – 2024”
	10.00-10.30	Morning tea
	10:30 – 11	Christopher J Davey: “ <i>Metal for the pyramids: Mining and metallurgy in Old Kingdom Egypt</i> ”
	11.00-11.30	Anne Both: “ <i>A two-year adventure in the Eastern Goldfields of West Australia: from Gawler SA to Crawford’s Patch WA 1895-1897</i> ”
	11.30-12.00	Wendy Carter: “ <i>Two prospectors in the WA Goldfields in the 1890s</i> ”
	12 – 1 pm	Lunch
	1 – 5 pm	Tour of Genesis Sons of Gwalia Mine & expansion projects
	5:15 pm	AGM at the Leonora Bowling Club
7 – 9 pm	Campfire supper at the Leonora Motor Inn sponsored by Shorty	
Thursday	9 – 9:30 am	Richard Mazzuchelli: “The Coolgardie Redemption Gold Mine – Portent of a Ghost Town”
	9:30 – 10	Anthea Harris: “ <i>JO Kelly - an unknown man of the WA goldfields who had a famous wife.</i> ”
	10 – 10:30	Morning Tea
	10:30 - 11	Gordon Boyce – “ <i>Oceanic Mineral Transport, 1870-1914. Tramp Shipping Operations and Enterprises</i> ”
	11 – 11:30	Matthew Churchward “Secrets of a prospector’s sovereign purse: the true story of T.T. Gaffney on the Goulburn and Jordan

	<p>11:30 – 12</p> <p>12 noon</p> <p>2 – 3 pm</p> <p>6 pm</p>	<p>Goldfields”</p> <p>Wendy Carter: “<i>Stories from the Gwalia Museum</i>”</p> <p>Bus departs for the afternoon tour.</p> <p>Visit Minesite Recycling east of Leonora</p> <p>Lunch at the Malcolm Dam</p> <p>Visit the look-out over the Murrin Murrin cobalt nickel mine with talks from staff</p> <p>Visit the Mount Morgans cemetery & Municipal office</p> <p>Conference dinner outdoors at the Gwalia townsite – weather permitting! Bus will depart from outside the Leonora Motor Inn at 6 pm</p>
Friday	<p>9 – 10:30am</p> <p>10:30 - 11</p> <p>11 – 11:30</p> <p>12 – 1pm</p> <p>1 – 1:30 pm</p> <p>1:30 – 2 pm</p> <p>2 – 2:15 pm</p> <p>2:15 – 2:30</p> <p>2:30 – 3 pm</p> <p>3 pm</p>	<p>Depart from the Leonora Bowling Club for the Leonora District High School for a visit out “on country” with the students and morning tea</p> <p>A short photographic stop at the Leonora State Battery with tailings owner Boyd Sprigg</p> <p>Back to the Leonora Bowling Club</p> <p>Open forum re the digital future of the AMHA</p> <p>Lunch</p> <p>Nic Haygarth: “<i>The Shepherd and Murphy Mine: a steady and versatile producer</i>”</p> <p>Ross Both: “<i>Jock Graham: A Man of the Earth</i>”</p> <p>Presentation on Broken Hill</p> <p>Wind-up</p> <p>Afternoon tea</p> <p>Bus departs for Kalgoorlie-Boulder dropping off at the Kalgoorlie Railway Station & in Hannan Street at St. Barbara Square.</p>

Extended Abstracts

Australian regulation and controls on gold

Patrick Bertola

Former Chief Investigator, ARC Leonora History Project, University of Western Australia

Historically, gold has had three main functions: as a measure of value or universal money equivalent; as a store of value; and as a medium of exchange. The growth of the world economy, the presence of gold standards in various forms, the limitations on production and the needs of money forms that best suited the needs of the capitalist world economy have involved the use of gold in conjunction with currencies and various forms of ‘paper’ credit to escape the limiting effects of real (gold) money, and to avoid what were seen as problems of gold supply. In addition, paper currency has enabled the issuing authority to appropriate the substantial seigniorage that came with national currency status. This paper briefly examines some of the steps that Australian authorities took in their attempts to overcome the inherent tensions between real/gold money and the needs of the developing economy.

Gwalia through the Leonora Local Government Rate Books, 1922/23 to 1966/67

Patrick Bertola

Former Chief Investigator, ARC Leonora History Project, University of Western Australia

An examination of the rates books for the Leonora Road Board (subsequently the Leonora Shire Council) and in particular the Gwalia Ward provides, with qualification, the basis for certain empirical and quantitative descriptions of the historical development of those entities. For Gwalia, this includes consideration of the growth and decline of population, ethnicity, property and land use, and the relative importance of the centre and gold mine at Gwalia to the local government more generally.

A two-year adventure in the Eastern Goldfields of West Australia: from Gawler SA to Crawford's Patch WA 1895-1897

Anne Both

23 Windsor Street, Fullarton, South Australia 5063

Drawing on the letters of the two Deland Brothers to family and friends in South Australia, it is possible to track their exploits and impressions in the years 1895-1897 spent on West Australian goldfields.¹ During these two years they strove to maintain the standards of civil life as they knew it, whilst at the same time making some money.

The brothers were born to Benjamin Deland and his second wife. He had arrived as a young man from England in 1855, and was soon enveloped in the prosperous middle class of South Australia. When the family suffered financial loss related to their small farms and the State was undergoing some financial stress, the eldest son Edward Campbell Deland, (known as Cam) following the loss of his employment, seized the opportunity to seek work on the recently discovered goldfields of West Australia.

Arriving there in June 1895 after a journey by ship from Port Adelaide to Albany, Cam transferred to Southern Cross via the newly opened railway. He soon began employment in a forwarding agency, which handled inward goods for Kalgoorlie and surrounding mining field. After a move to Kalgoorlie, with a newfound friend (Jim Ellis), he set up a bakery to produce bread using flour from Gawler SA. Several employees assisted this enterprise and he encouraged other family members to move across to WA. Among these was his young brother Charles who arrived in February 1896, and acquired a Miner's Right soon after arrival. He worked for Cam until the partnership with Ellis was sorted out, following its collapse due to Ellis' speculation on the stock exchange. Charles moved to Menzies where he began employment in a drapery business.

The brothers rode their bicycles out to mining camps as far afield as Mt Margaret and what today is known as Laverton. They were also on a claim with three others hoping to "strike more stone" and float a company. This was unsuccessful.

Whilst Cam's letters contain much about the commerce in which he was engaged, it is Charles, through his letters home, who provides much of the "colour" of the goldfields in town and camp. The letters record impressions of living conditions, the people encountered, and occasional reference to the aboriginal population, the environment and mining activity.

In late 1897 they decided to return to SA following the sale of their claim, subsequently settling down and becoming hardworking members of their community.

¹ Michael R Best, *A Lost Glitter*, Wakefield Press, 1986, 258pp.

Jock Graham: A Man of the Earth

Ross A. Both

23 Windsor Street, Fullarton, South Australia 5063

John ('Jock') Graham (1893-1975), the most prolific of Australia's coal miner poets, was born at Cumnock, near Glasgow. He left school at 13 to work in Scottish coal mines, and during World War I he served in the Royal Navy. In 1922, he emigrated to Australia to work on the Hunter Valley coal mines. He took part in the rescue attempts when 21 men perished as a result of a fire and explosions in September 1923 in the Bellbird Colliery, near Cessnock. After losing a leg in a mine accident at Richmond Main Colliery, at Kurri Kurri, in 1928 he became a winding engine driver on the vertical shafts at Hepburn No. 2.

Graham was a union activist and a member of the Kurri Kurri branch of the Communist Party of Australia. He wrote poems and short stories on a variety of subjects but was best-known for his forthright and uncompromising working-class verse, and was regarded as miners' poet laureate. Many of his poems appeared in the Miners Federation journal *Common Cause* and the local newspaper *Cessnock Eagle*. Collections of his poems were published in two books, *Blood on the Coal*¹ and *Dark Roads*.² One of Graham's poems *A Man of the Earth* was set to music by John Arcott and recorded by Phyl Lobl as the title song on a Larrikin Records LP.³ The song has been described as 'an anthem to miners' militancy and heroism'.⁴



Jock Graham, ca.1960



By profession and birth I'm a man of the earth,
I burrow in it like a mole;
I dig it and drill it, and blast it and fill it
For that great commodity coal.

To some I'm a brave man, to others a knave man
Who's putting the land in a hole;
A strike and attack man, a black man and slack man
Who plunders the country of coal.

It's narkin' at times to be blamed for their crimes,
And placed in the villainous role
Invented by story, press-jury and tory,
The profit-made agents of coal.

No story of men who are suffering pain;
Of heroes who starve on the dole;
Nought written or spoken of hearts that are broken:
The widows and orphans of coal.

The court is the gauge which determines my wage,
The parson looks after my soul;
My hands are my boss's, his gains are my losses;
My body is bartered in coal.

The gaps in our lines: "Red roll of the mines",
Show death has been takin' his toll,
While snipers at maimed men and dead men and famed men
Grow fat on the blood on the coal.

Yet through muck and mire and lung-dust and fire,
More clearly I'm seein' my goal:
Of diggin' and drillin' and blastin' and fillin';
Supplyin' a socialised coal.

Singabout, Bush Music Club, NSW, v.1, p. 11, 1957.

¹ John Graham, *Blood on the Coal*, Current Book Distributors, Sydney, 1946, 31 pp.

² Jock Graham, *Dark Roads*, Elizabethan Press, Sydney, 1973, 70 pp.

³ *Man of the Earth*, Larrikin Records LRF001, 1975

⁴ 'Graham, John (Jock) (1894-1975)', People Australia, National Centre of Biography, Australian National University, <https://peopleaustralia.anu.edu.au/biography/graham-john-jock-33731/text42223>

Oceanic Mineral Transport, 1870-1914. Tramp Shipping Operations and Enterprises

Gordon H. Boyce

Emeritus Professor, School of Business, University of Newcastle, NSW, Australia

The presentation examines the rise of the modern tramp shipping industry in the context of three salient developments that took place around 1870 and shaped operations down to 1914. The fortunate three-way conjunction included the opening of the Suez Canal, the emergence of a dependable international telegraph system, and the introduction of the compound (two-cylinder) steamship.

The Suez Canal made it possible to conduct long distance transport of low-value bulk commodities between the East and the West. A viable telegraph enabled management to exert direct control over vessel movements, and the steamship provided a means for cost-effective conveyance of primary goods with greater safety than for the sailing ship, and enabled executives to predict voyage times with much greater precision. These developments played a direct role in extending and shaping an increasingly multilateral global trading system.

Using correspondence and company records, the paper outlines the tactical aspects of deploying and controlling tramp ship operations. The same types of sources reveal the range of strategic considerations that shipowners used to harness the resources they needed to develop corporate organisations of ever-greater size. By 1914, British operators controlled the largest fleet of tramp ships in the world.

The presentation is based on elements in Gordon H. Boyce, *A History of British Tramps Shipping, 1870-1914*, Vol. 1 (Liverpool: Liverpool University Press, 2024). Vols 2-4 forthcoming.

Stories from Gwalia – a photographic presentation

Wendy Carter

Fellow of the Federation of Australian Historical Societies
Gwalia Museum, Leonora WA 6438

Working at the Gwalia Museum, not a week goes by without people ringing up about photos and documents they would like to share with the museum, or visitors who turn up with them, in the hope of learning more about their forebears, or wanting to share their stories so they won't get lost. Some of the stories are heart-wrenching, others funny, some tragic.

Peter Dillon sent me a wonderful selection of photos of the Tobias Brothers grocery store in Coolgardie, which he found in a scrap book in the Battye Library.

John Thomas Pearce was tragically killed in 1907, only a few weeks after his wife and daughters arrived from England. They had been separated for five years while he saved money and built them a house to live in.

Kate Marshall sent me the photos of her grandparents who lived in the Hoover House from 1923 to 1937. Victor Thomas Edquist was the clever and thoughtful metallurgist who arrived in Gwalia in 1922. At this time, the mine was all but closed, as 320 men had lost their jobs almost overnight in 1921, after a big fire in the power station meant they could not work underground. It took two years to rebuild and start up the mine again, in 1923. A year after his arrival Edquist was made Acting Manager and then Manager, a position he held until he became Bewick Moreing's representative in Melbourne.

Mary Meier arrived here with her husband Hans, a German migrant who had been promised a good job and a house to go with it. She described 1955 as the loneliest year of her life. Her daughter Christine Jones, who was born in Leonora that year, sent me her mother's memories of the year along with photos.

Figure 1: Mary Edquist (b. 1915) in the Manager's pool.



Source: Kate Marshall

Figure 2: Tobias Brothers store in Coolgardie; they grub-staked the prospectors who pegged the lease of the Sons of Gwalia Mine in 1896.



Source: Battye Library collection

Two prospectors in the WA Goldfields in the 1890s

Wendy Carter

Gwalia Museum 16A Tower Street Leonora-Gwalia 6438

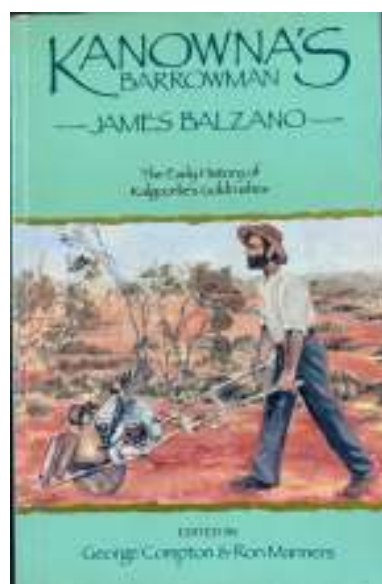
Imagine pushing your barrow or shovelling dirt all day, making camp, hunting around for something to eat, then using a stub of a candle to write your diary for the day. Yet here are two diaries from prospectors in the Eastern Goldfields of Western Australia in the 1890s who did all of this and more.^{1,2}

James Balzano was born in Italy, but then lived in South America and the United States before joining the Gold Rushes in New Zealand and Victoria, before moving to Western Australia. He never found much gold, but left a valuable legacy in his writings.

The other was Johnny Aspinall, born in New Zealand, son of a prospector and sluicer on the Shotover River, who lived from 1873 to 1896 and travelled by ship from Dunedin to Hobart, Melbourne, Adelaide and Fremantle, to go prospecting in Western Australia at twenty-one years of age.

Both diaries cover the day-to-day difficulties and hardships in the life of a prospector of the day. Finding water and food feature prominently. Transport and safety are similarly big concerns, from barrow wheels that have fallen off, to their camps getting ransacked of what precious little they had.

Despite their general respect for most other people, both reflect the prejudices of the day regarding 'Afghans' and the Aboriginal people they met. In fact, both owed their lives to strangers who helped them at some stage – not that that helped Aspinall in the long run, although Balzano lived happily into old age in Kanowna.



¹ A.J. Thompson (Compiler), *And some found graves – The Goldfields Diary of John Aspinall*, Hesperion Press, 1993. ISBN 0 85905 186 2

² George Compton and Ron Manners (Editors), *Kanowna's Barrowman – James Balzano: The Early History of Kalgoorlie's Goldrushes*, Mannwest and Hesperion Press 1993 ISBN 0 85905 176 5

Secrets of a prospector's sovereign purse: the true story of T.T. Gaffney on the Goulburn and Jordan Goldfields

Matthew S. Churchward

Senior Curator, Engineering & Transport, Museums Victoria



Figure 1: Portrait of Thomas Terence Gaffney, circa 1864; T.T. Gaffney's Sovereign Purse and its contents; (background): 'Jericho' engraving, *Illustrated Australian News*, 19 Jan 1880. **Sources:** Portrait courtesy of P. Downes; Museums Victoria; State Library of Victoria.

In the spring of 1859, a young Irish migrant, Thomas Terence 'Red' Gaffney left Enoch's Point on the Big River goldfields with a brother and two mates, intending to try their luck prospecting on the upper reaches of the Goulburn River. They climbed 3,000 feet over the summit of Mount Terrible, before descending into the steep and heavily timbered Goulburn Valley. Working their way slowly upstream, after some weeks they discovered a promising prospect near the mouth of a small tributary that later became known as Gaffney's Creek. There, they began cutting a water race and opening out a sluicing claim.

In 2021, Museums Victoria was contacted by a descendant of T.T. Gaffney offering for donation a small sovereign purse containing a gold half sovereign and two small nuggets. According to family folklore, the gold samples were 'Red' Gaffney's 'discovery nuggets', kept as a memento of his first good 'washout,' in January 1860. The party's initial success kicked off a major rush that saw 4,000 diggers flock to the Upper Goulburn within two years and earned 'Red' a government reward of £200. But just who was Thomas Terence Gaffney and was he really the original discoverer? Much of what has been published about the discovery is riddled with inaccuracies and confusion.

This paper will be presented in the form of a microhistory that delves into the background of T.T. Gaffney and his subsequent life within the community of the Jordan goldfields, while in the process providing an insight into a richer general history of the wider region.

From lignite to kilowatts: celebrating the centenary of coal mining at Yallourn - Poster presentation

Matthew S. Churchward

Senior Curator, Engineering & Transport, Museums Victoria

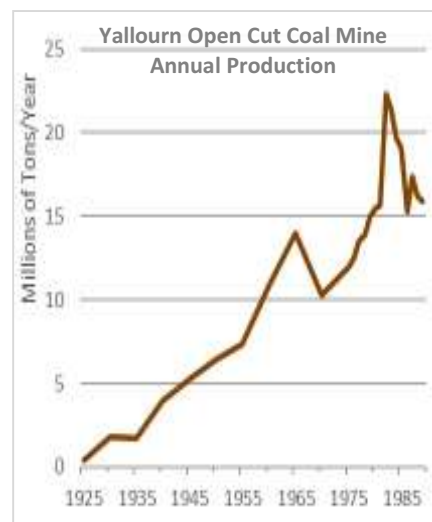


Figure 1: Bucyrus Type 175B 3½ cubic yard capacity steam shovel engaged in early coal winning with Yallourn A Power Station in background, 1925; Yallourn lignite sample (E 7604); Experimental Briquette, circa 1921 (HT 56098)
Sources: SECV Image Collection; Mineralogy Collection, History & Technology Collections, Museums Victoria.

In August 1925, the Yallourn Open Cut Mine began delivering coal to the newly commissioned Yallourn Power Station – Australia's first baseload thermal electric power station built on a major coalfield outside one of the country's capital cities. Over the century since, the Yallourn mine has been a pioneer of many new mining technologies and a prodigious producer of over a billion tons of coal (and a lot of atmospheric carbon dioxide)! It still ranks amongst the nation's five largest operating coal mines by annual output.

Initially developed and managed for seven decades by the publicly-owned State Electricity Commission of Victoria, the Yallourn Coal Mine was Australia's first fully mechanised open cut coal mine, pioneering the introduction of steam and electric-powered excavators, bucket-chain dredgers, bucket wheel dredgers, electric coal haulage trains and extensive coal conveyor systems. Its output has provided fuel for six generations of steam turbine driven electricity generators, and the raw material for two briquette works, in the process providing the 'lifblood' for much of Victoria's industrial development throughout the 20th century.

This topic will be presented as a poster presentation.



Source: SECV Annual Report

Sons of Gwalia – A Story of Technological Change

Dr Sandra E. Close

Surbiton Associates, Melbourne

The Sons of Gwalia Mining gold mining operation has experienced several significant technological changes in its almost 130-year life, particularly in relation to its treatment plant.

Following its discovery in 1896, a small 10-head stamp and associated plant was erected. In late 1897 it was acquired by Bewick Moreing, then floated on the London Stock Exchange in early 1898 as Sons of Gwalia Ltd, with Bewick Moreing retaining management.

By 1900 a large plant was constructed employing the MacArthur Forrest Cyanide Process which had first been patented in 1887. The plant comprised 50 head of stamp, plates, tables, Edwards roaster, concentrate grinding pans, agitators, filter presses and double treatment tanks for cyanide percolation of tailings. A 56-foot tailings wheel was also a prominent feature. The new large surface treatment works coincided with the development of the underground mine with, ultimately, its distinctive inclined shaft. However, by 1914 the treatment plant had been substantially reconfigured to incorporate fine “sliming” of the ore in long, rotating tube mills. This followed the adoption of a similar process introduced in several of the Kalgoorlie operations. A larger steam winder was also installed, as the shaft deepened.

However, the surface works were damaged when fire broke out in early 1921, with the replacement plant commissioned by 1923. A total of 30 heavier stamps and larger tube mills were installed, including over time the introduction of Oliver Filters.

Victor L Edquist, a Bewick Moreing man, first went to Sons of Gwalia in 1923 and became Superintendent in 1927. He had long been interested in using carbon to recover gold from cyanide solution and carried out further experiments at Sons of Gwalia, patenting the Edquist Process in 1934. This was far more significant than was understood at the time.

The operation continued, despite cost pressures, until it closed at the end of 1963.

The Third Gold Boom started in the early 1980s, with the introduction of the CIP process. Many new gold operations began, based on the old mines of the Second Gold Boom of the 1890s/early 1900s. In 1981 the Lalor Brothers, via Hawk Investments, took an interest in the leases at Sons of Gwalia. In 1983 Sons of Gwalia NL was listed on the ASX and started re-treating tailings, then the company arranged for Grants Patch Mining Ltd to continue tailings retreatment in 1986. Meanwhile, Sons of Gwalia NL undertook exploration, then open cut and later underground mining, after the erection of a CIP plant.

Following the sad demise of Sons of Gwalia (then Ltd) in 2004, St Barbara Ltd purchased the entire company in 2005 and in 2008 a larger CIP/CIL plant was commissioned at the Sons of Gwalia operation. In mid-2023, Genesis Minerals Ltd acquired St Barbara’s Leonora assets, including the Sons of Gwalia operation.

Despite the various changes in technology, through much of its life the Sons of Gwalia gold mine has continued to yield its significant gold endowment.

Metal for the pyramids: Mining and metallurgy in Old Kingdom Egypt

Christopher J. Davey¹

¹ University of Melbourne and Australian Institute of Archaeology

Of the Seven Wonders of the Ancient World, only the Great Pyramid of Giza, which is also by far the oldest of the wonders, still remains standing. However, it is not generally appreciated that the pyramids of Giza owe their existence to the mining and processing of copper, and not just the application of extraordinary amounts of human energy. The stones from which the pyramids were constructed were extracted with the aid of copper tools that wore away in the process, requiring hundreds of tonnes of copper to be mined and processed to replenish them.

The earliest production of copper in ancient Egypt has not been well understood. The paper will use archaeology, iconography, and scientific analyses to explain the beginning of Egyptian mining and processing of copper.¹ The industry is different in character from that known from neighbouring regions. Indeed, it differs from any metallurgical process known since that time.



Figure 1: Photograph of a relief in the 6th Dynasty Tomb of Mereruka, Saqqara, showing the melting, casting and hammering of copper. Source: The Author.

¹ Christopher J. Davey and Peter C. Hayes, 'Out of the Fiery Crucible: Egyptian Old Kingdom metallurgy', *Buried History*, vol. 59, 2023, pp. 11–28, <https://doi.org/10.62614/wmj1b145>.

Launch of
The Complete Story of Gold in Western Australia
by Peter Dillon

Peter's career in the mining industry spanned four decades, getting underway a few years before the modern era gold boom started. A long stint with Western Mining was followed by four years at Leinster ... his career in nickel lasting eleven years.

At age 32, he was appointed Administration Superintendent at a gold mine in Mt Magnet and later transferred for a five-year stint at Kalgoorlie before joining the early FIFO brigade at Big Bell, which completed nine years with the Normandy / PosGold Group.

Site management roles with Joseph Gutnick's Great Central Mines, and AngloGold, rounded out his FIFO experience in Western Australia. Expatriate experiences were in Papua New Guinea, China and the Philippines ... in the latter two projects he was tasked with setting up the financial, administrative and procurement functions from scratch, on greenfields mine developments in remote and extremely challenging locations. Other stints in WA were at Coolgardie and Golden Grove.

Peter also spent a number of years providing periodic consultancy for Chinese investors, including travelling to the USA looking for coal mines to buy, looking to develop an iron ore project in the Pilbara, and seeking opportunities in the uranium industry (being the first foreigner to visit a particular uranium mine and its rudimentary processing plant in China was another memorable experience).

Peter's site based career together with a long historical interest and a passion for writing combined to conceive *The Complete Story of Gold in Western Australia*. Countless books, journals, studies, photographic and memorabilia collections, and the world wide web in the contemporary era, cover different aspects of this story but today's vast electronic troves facilitate research like never before and they provide opportunities to revisit and, in some cases, challenge written history.

Volume 1 covers the Historic Era up to 1980 ... the discoveries, the mines, the towns and production data. Volume 2 (currently nearing completion) provides encyclopedic coverage of mines and mining companies from 1981 to the end of 2023.

In all, eight thousand hours of work.



Genesis Minerals Ltd.

Raleigh Finlayson

Genesis Managing Director

This presentation¹ follows Genesis' focus on the Leonora area, and the progress made since they started mining there, before they bought the Sons of Gwalia Mine from St. Barbara Gold Mines in July 2023.

Some background: Raleigh Finlayson is local to the area, having grown up on Jeedamya Station, 50 km north of Menzies and 58 km south of Leonora. When Raleigh and his two siblings were young their maternal uncles, Peter and Chris Lalor, used to call into the station. The Lalors were using open-cut methods at the Sons of Gwalia Mine, and as the children grew older, they would visit, sometimes working there for pocket money.

Raleigh and his sister Marnie studied at the Western Australian School of Mines in Kalgoorlie; Marnie is now Rio Tinto's Managing Director of battery minerals in the Pilbara, while Raleigh is Managing Director of Genesis.

Raleigh gained both a First Class Mine Managers Certificate and a Graduate Certificate in Applied Finance and Investment. He is a mining engineer with over 20 years of technical and operational experience, including both underground and open-pit operations. He has worked as CEO at Genesis since 2022, and prior to this he was the Managing Director of Saracen Mineral Holdings and Northern Star Resources.

¹ Rayleigh Finlayson gave this presentation at the Diggers and Dealers mining conference in Kalgoorlie-Boulder in August 2024.

JO Kelly - an unknown man of the WA goldfields who had a famous wife

Anthea Harris

PO Box 366, South Perth WA 6951, Australia

Bertram James Ossili Kelly (JO) was one of the many young men flocking to the goldfields in Coolgardie in 1896. Like so many, he did not make his fortune but ended up with a debt that took him years to pay off, managing the battery at Twenty Mile Sandy, outside Nullagine, from 1905. He “did a good deal of reading, smoked innumerable Russian cigarettes, spent a lot on gramophone records, spent more money than I should on prospecting and whiskey and paid off all liabilities”¹ during his “penal servitude in the N West” where the “temperature averaged 108 degrees for 6 months”.

He returned to Kalgoorlie in 1911 and worked on other tailings batteries until he joined his brother in Rhodesia, returning to Perth in 1917, and taking an office job in the Wheat Scheme that he “didn’t much care for”. He had befriended Michael James Calanchini, (Calli) who, from being a magistrate in Kalgoorlie, rose to the top in the Department of Mines in Perth. In 1918, Calli took JO to meet his friends, the Gibbs family, in South Perth. The story goes that the daughter, May, had refused all Calli’s romantic overtures but after that dinner she wrote that she had met the man she was going to marry. JO merely recorded that he had met Miss May Gibbs.

May was building a career as an artist and author and had moved to Sydney where there were more opportunities. She was staying with her parents for a few months and must have spent much of that time with JO, because they were married the following year on her next visit. May’s stories of Snugglepot and Cuddlepie had just been published, and the family expected JO to help her improve her pay and gain international recognition.

He could not achieve this, but the marriage was a very happy one of intellectual debate, breeding Scottie dogs and building Nutcote, a home in Neutral Bay which has become a tourist attraction. They must have learnt to compromise on her passion for preserving wildlife and his for hunting, shooting and fishing!

JO wrote regularly to May’s father Herbert Gibbs, and that correspondence is in the Stanton Library in North Sydney. Before he died in 1939, he wrote “You know those days at Twenty Mile were pleasant. I know and I expect you’ll grin to yourself, they were healthy, carefree, open-air days and unlike city folk we told each other what we thought of each other. In towns, you are hemmed in, conventional and find a lot of insincerity”.

¹ All quotations in this abstract are from Marion and Neil Shand Collection, A71/9, Local Studies Collection, Stanton Library, North Sydney.

The Mount Lyell Picnic 1897–2024

Nic Haygarth

Historian, 60 Frederick St, Perth, Tasmania, 7300

Pyritic smelting at the Mount Lyell Copper Mine in the years 1896–1921 deforested the landscape, choked rivers with tailings and slag and polluted the air. The sulphur cloud that hung over Queenstown was even said to deaden the taste buds.

Perhaps nature could revive them. In 1897 staff of the Mount Lyell Co's Railway Works decided to hold 'a grand united picnic of all Mount Lyell Co employees'. Since the railway through to Regatta Point and Strahan was unfinished, a day at the seaside was out of the question—but the King River beckoned. Six hundred Queenstown picnickers and 140 from Zeehan and Strahan were railed to the terminus at Teepookana, mostly on temporary bench seats mounted on open trucks. From there they were ferried precariously by barge to Piccaninny Point at the mouth of the King River, where land had been cleared for a picnic ground.

The event was a huge success. So much so that when the railway was finished right through to Strahan it became an annual tradition—the best day of the year. A day at the beach. A day in the sun! The 42-km train trip from Queenstown to Strahan took nearly three hours. On arrival at West Strahan Beach all children were given ice creams, lollies and fruit. Water was boiled on campfires, parents opened picnic baskets, kids chased 'tiddlies' in the creek. Then the games and races began. Coming home tired and sunburnt was a quieter affair. Sozzled dads were berated, sandfly bites were tended—and kids hatched their plans for next year.

Map 1: Location map.¹



Figure 1: Mount Lyell Picnic, King River, 1902.²



¹ Basemap from TheLIST © State of Tasmania.

² *Weekly Courier*, 15 May 1902, p. 1727.

The Shepherd and Murphy Mine: a steady and versatile producer

Nic Haygarth

Historian, 60 Frederick St, Perth, Tasmania, 7300

Having a large, rich ore body is not the only path to mining longevity. Some mines with a small resource last because they produce relatively rare metals in high demand; a case in point is the Shepherd and Murphy Mine in north-western Tasmania. In the years 1893–1928 and 1953–57 it had the modest return of 525 tonnes of tin, 255 tonnes of tungsten and 71 tonnes of bismuth, changing its focus as circumstances and the market dictated and employing from 40 to 70 people. In its early years when its isolation made it impossible to introduce a processing plant, it marketed unprocessed bismuth which it could sell in England. When World War One (1914–18) and the Korean War (1950–53) created a high price for tungsten for armaments, the Shepherd and Murphy directors focused on tungsten production. Throughout its lifespan the mine was also a steady producer of tin.

Figure 1: Shepherd and Murphy processing plant, Moina, Tasmania, c1920.



Source: NS6719/1/2, Tasmanian Archives.

Don and Donna Reid- documenting mining history

Geoff Hudson

PO Box 48, Fullarton, South Australia, 5063

Don and Donna Reid moved to Leonora in 1970, in the early days of the nickel boom, following the 1966 discovery of the Kambalda deposits south of Kalgoorlie by Western Mining Corporation (WMC). Don was one of the longest serving geologists of the WMC Group, having joined in January 1955 after being recruited by Chief Geologist, Don Campbell.

Initially working on mining operations at Coolgardie and Bullfinch, in 1957 Don won a Rotary Club Post-Graduate Scholarship to study at the Colorado School of Mines. He met Donna, and they were married prior to returning to Australia in 1958, where Don worked on a great variety of projects from his Perth base, on occasions accompanied in the bush by Donna.

When Don was posted to Gwalia they moved into the “White House”. These were the pre-FIFO days when geologists and their families lived in the remote locations and formed part of the local community, so their children Mark and Kerry were added to the school population.

They immediately recognised the heritage value of Gwalia and set about its preservation. The old mine office was seen as an ideal museum, and Don, Donna, and a small group of residents began sourcing photos and articles for exhibition. The mine area and abandoned houses were searched for material, which was cleaned and restored; the mine office was renovated, and displays and illustrative material installed. The gallery opened in May 1972. At the same time, the Leonora Tourist Committee was formed with a small subsidy from the Shire of Leonora and the WA Department of Tourism,¹ and later support from Sons of Gwalia and many others.

Don did a lot of the grunt work and researched the woodline rail networks that the mine was dependent upon for fuel and mine timber, while Donna sketched local scenes and retrieved and assembled sculptures from the wooden foundry patterns that remote engineering operations required to make replacement parts.

Don was transferred to WMC’s Kalgoorlie office in 1980 where he took over management of Central Technical Records (CTR), the archive of exploration and related information of the company, and later he and Donna relocated to Adelaide where he continued this work. Don wrote, and Donna illustrated the two volume *They Searched - A History of Exploration within Western Mining Corporation*^{2,3}. Donna also compiled *The Best of Ex Div.- selection of articles from Ex Div. magazines 1971 to 1987*⁴ which included illustrations by her daughter Kerry.

When Don retired from WMC in May 1996 they retired to a small property in the Adelaide Hills, but in January 2020 bushfires destroyed their home and Donna’s studio and all the contents. The loss of their house and contents took a serious toll on their health and Don passed away in August 2022. More recently daughter Kerry also passed away after a long illness. A sad ending to a family who contributed so much to the preservation of Australian Mining History.

¹ Don and Donna Reid, *Leonora and Gwalia - An Historical Sketchbook*, The Leonora Tourist Committee, 1976, 24pp.

² Don Reid with Donna Reid (Illustrations), *They Searched- A History of Exploration within Western Mining Corporation*, Part 1- *The first 20 years*, Western Mining Corporation, 1981, 55pp.

³ Don Reid and Donna Reid (Illustrations), *They Searched- A History of Exploration within Western Mining Corporation*, Part 2- *The Years of Growth 1954-1975*, Western Mining Corporation, 1998, 100pp.

⁴ Donna Reid, Compiler, “*The Best of Ex Div.- selection of articles from Ex Div. magazines 1971 to 1987*”, Western Mining Corporation, 1989

The reopening of the Sons of Gwalia Mine in 1983: observations, 1980-2000

Chris Lalor

Director of Sons of Gwalia N.L., 1983-2004

The original Sons of Gwalia gold mineralisation was discovered in 1896. The Sons of Gwalia company was floated on the London Stock Exchange in 1898 and operated continuously until 1963 when the mine closed.

The mining titles and the commercial activity of Hawk Investments to a new company were put together by brothers Peter and Chris Lalor between 1980-1983.

In 1983 the Lalors issued a Prospectus to raise \$2.5m and the new Sons of Gwalia N.L. was listed on the Australian Stock Exchange.

This presentation covers:

- Tailings Dump 6 Mt @1.3 g/t. gold.
- The ore reserves and resources at the old mine. Mine exploration.
- The relocation of the historic Gwalia Headframe.
- Open cut mining commencement through to underground operations over 20 years.
- The formation of the Gwalia Historical Precinct Association Inc.
- Interaction with the Pastoralist Industry and Local Government.
- The new WA Mining Act 1978.
- The Native Title Act 1993.
- The WA Government royalty regime.
- Aboriginal relationships - employment.
- The Sons of Gwalia Mine production, profits, dividends, forward selling.
- Corporate activity. The Board and Management.
- Mining techniques and geology.
- Personalities and selected events.

The Coolgardie Redemption Gold Mine – portent of a ghost town

Richard Mazzucchelli

PO Box 189, Kalamunda, WA 6926

The first public mention of the Coolgardie Redemption Gold Mine came in 1901, almost ten years after the initial rush, and at a time when production from the major mines was already in decline. The mine is located less than two kilometres east of the town, just south of the famous Fly Flat, where Bayley and Ford made their find. Owners George Mitchell and Sons sank a shaft on subtle indications in a soil-covered flat, and the crushings from a depth of 70 feet yielded ore running 1.5 to 3 oz/ton. Not shy of publicity, the Mitchells frequently exhibited specimen stone in shop windows in Coolgardie. Consequently, the mine became well known as one of the only profitable operations in the district, but as the mine deepened, water problems emerged, culminating in a lengthy period of inactivity between August and December 1905.

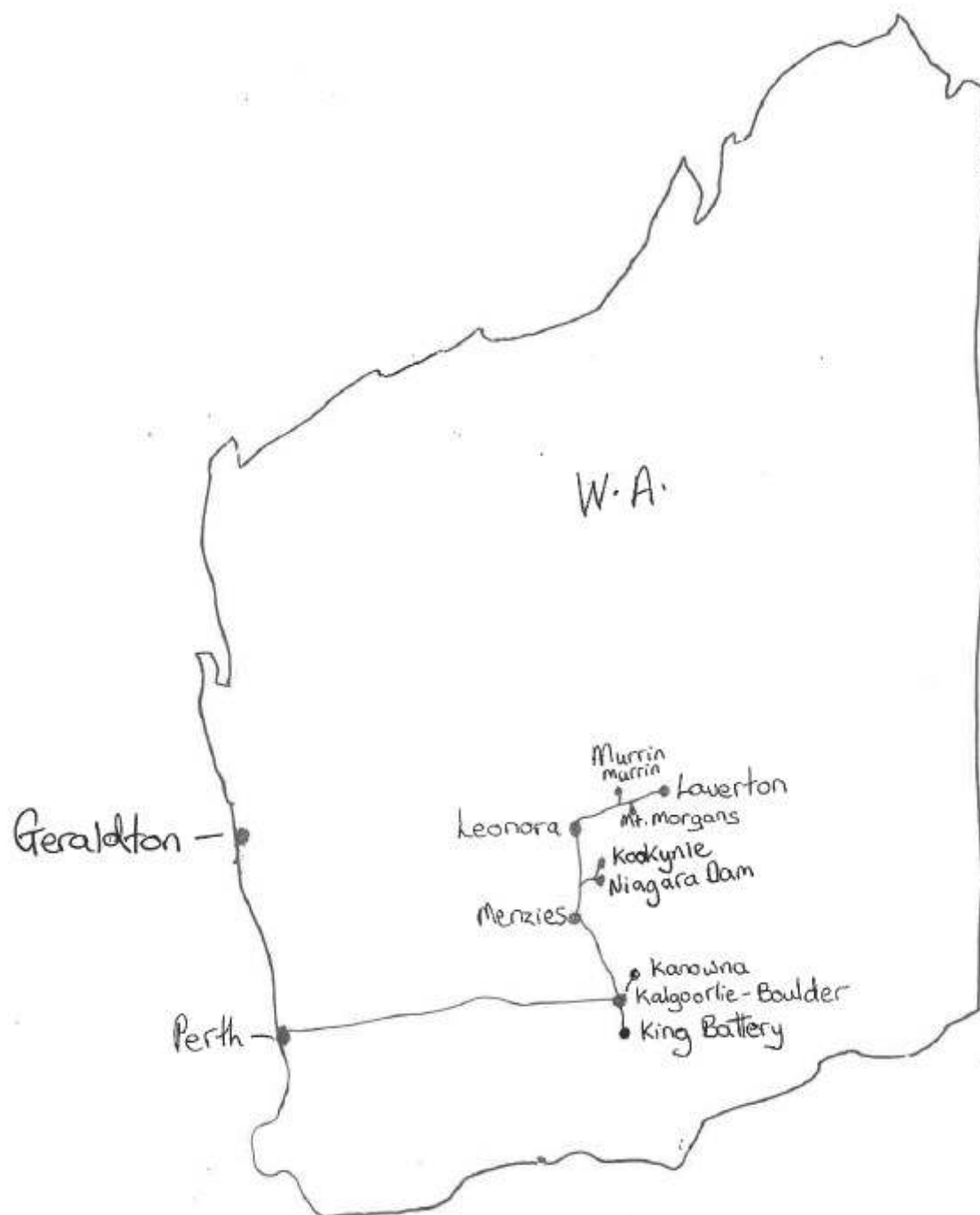
During this time the mine and plant are mortgaged to a Perth financier and the mine staff sue the owners for unpaid wages. By the end of January 1906, the water problems have been overcome, the workers and creditors are paid and the mine is working ‘at full swing’¹. A month later all workers are paid and laid off, the owners apply for six months’ exemption and sail for London, intent on floating the mine. They return, encouraged by their reception, but the float does not proceed. After some years of struggling to keep the assets intact, enterprising Kalgoorlie and Coolgardie businessmen mobilise local capital to float the Coolgardie Redemption Gold Mining Company NL in 1907.

The company sinks a new vertical shaft to replace the original, which was a composite of vertical and underlay sections. Sinking of the shaft proceeds without incident to a depth of 280 feet, when a fire breaks out in the uppermost 25 feet of timbering, and part of the mullock dump at the surface falls down the shaft. The damage is repaired, the shaft soon reaches 300 feet, and a cross-cut started to intersect the reef at that level. In October 1908, a ceremony is held at the mine to mark the start of the Cornish Lift Pump, confidently expected to keep the mine water-free. Shareholders and their ladies hear speeches and drink toasts to the success of the Company, ‘which may yet redeem Coolgardie’². About the same time, shareholders approve a scheme to subdivide the shares from a value of one pound to two shillings, in the hope more will invest. In mid-November 1908, the claim is made that water is a thing of the past, the cross-cut at the 300 foot level has resumed and the pump is only required twice weekly to keep the mine dry. In mid-January 1909, the next report says pumping has been continuous for the last five weeks, but mining should resume in a few days. Ten days later, a shot in the cross-cut causes a fresh inflow of water from the old workings. Eventually, the first parcel of ore from the new shaft is treated at the State Battery in May 1909, but the yield is a disappointing 16 oz from 77 ton. A few more parcels of ore are treated, but none match the high grades achieved by Mitchell and Sons in the Redemption’s heyday. By this time the Company is in debt and has insufficient working capital to continue mining or pay the wages owed. Various efforts to raise more capital prove fruitless. In 1910, after more than 12 months’ inactivity, the Kalgoorlie Western Argus laments that the Minister for Mines, as holder of the first mortgage on the mine and plant, puts such stringent conditions on its sale that no-one will take it up.

1 COOLGARDIE REDEMPTION. *Coolgardie Miner*, 30 January, 1906, p. 1.

2 THE REDEMPTION, INTERESTING CEREMONY. *Coolgardie Miner*, 29 October, 1908, p.3.

Notes



Site Locations

WA showing sites which will be visited between the King Battery and Mt Morgans.



Sons Of Gwalia Mine Precinct



History

The 'Sons of Gwalia' reef was discovered in 1896 by prospectors Carlson, White and Glendinning, (Gwalia is one of the Welsh poetic names for Wales) and was the most significant reef opened in the Leonora area. Seeking investments in the WA Goldfields, Bewick Moreing and Co. a London-based firm, sent a young American mining engineer, Herbert Hoover (later the 31st President of the United States of America), to Gwalia to evaluate its prospects.

Hoover noted, "...No other lode country in the world presents such an array of severe conditions which must be struggled against to do cheap mining..."

Hoover designed and commissioned, the Mine Manager's House (Hoover House), the Mine Office and the Assay Office in 1898, and designed the angled head frame, the only remaining 19th century wooden incline head frame left in the country.



1. Office & Museum

Built in 2014 to house the 1927 Chevrolet Hearse, 1908 Leonora-Gwalia Electric Tram and the 1935 International Murrin Murrin Mail Truck. Both the truck and hearse are still registered and occasionally used.

2. Midland Woodline Steam Engine (KEN)

Originally called 'KEN', the name of this engine was changed to 'Midland' during its period of use at the mine. However it is still, and probably always will be, referred to affectionately as 'KEN', which was an acronym for the names of three directors of the Sons of Gwalia. Transport was difficult and expensive in the Goldfields and Sons of Gwalia constructed a woodline rail service to gather and transport the enormous amount of Mulga timber needed to fuel the mine's steam and gas producer engines. The 20-inch gauge wood line ran west and south of Gwalia for up to 112km, covering an area of some 1,280 square kilometres

'KEN' was one of four engines built at the W.A. Government Railway Midland Junction workshops in 1934 for use on the Sons of Gwalia wood line. It ran until the mine closed in December 1963. Its engine is a 0-6-2T with outside frames, the cylinders are 9½" x 12", it has Walschaerts valve gear and a boiler pressure of 200 pounds per square inch.

2. Machinery Shed

The machinery shed is on the site of the original mine machinery shed which was removed after the sell-off of the Sons of Gwalia Mine following its closure in 1963. This shed now houses elements of the Leonora Gwalia power generator, pastoral machinery and equipment and other larger items of the collection.

4. Steam Winder

Along with the head frame, the Steam Winder and its shed were relocated in 1987 by the Sons of Gwalia N.L.

The Fraser & Chalmers steam winder, which came from Erith in Kent England, was installed in 1913 and is one of the largest steam winding engines remaining in Australia. Many other large steam engines were scrapped over the years as steam power was phased out to be replaced with gas or electricity. It has been conserved virtually intact and is in remarkably good condition.

The head frame and winder formed part of the hauling system at the mine site. The head frame provided guidance to the hauling ropes between the steam winding engine and the skips in the shaft, which carried the ore, miners, horses & timber. The winder elevated the skips up the incline of the head frame so that ore could be emptied into a storage bin for subsequent treatment.

5. Head frame

Originally located where open-cut mining is now in progress, this important structure was relocated to its present site by the Sons of Gwalia N.L. in 1987.

The head frame made of Oregon pine and built in 1899, is the only large timber underlie or incline head frame surviving in Australia, and indeed it is one of the very few timber head frames of significant size of any design dating from the 19th century. It is largely intact and the tipping ramp, ore bin and primary crusher can still be seen. It was extended in 1912-13 to accommodate the new larger wind.

6. Hoover House

Herbert Hoover designed this substantial brick home before he left Gwalia and it was built between 1898-99. It took around 2 years to build, due to the many disputes with upper Management over the cost of the house. When an average house cost £100 to build, this house cost £600!!! Some of the original furniture from that time survives to this day such as the built-in robes, the sideboard, the small square coffee table and the large display pedestals. Some of the other furniture items are original, not from Hoover's era but left behind from other mine managers who lived in the house in the decades following. Hoover left Gwalia before the house was completed but spent his 24th birthday in the dining room and stayed in the partially completed home before being called away to the expanding coalfields of China. Hoover also stayed in the house on his numerous visits to Gwalia after his return from China in 1902.

7. Mine Office

The mine office was built in 1898 and was converted into a museum in 1972 by a group of local residents. Display items for the museum were plentiful, as a surprising number of personal objects had been left behind when the miners moved on. In the 1960s, before vandals made their mark, it was possible to find miners possessions of all description including photographs, cleverly devised household implements and letters in the debris of the town. What was

salvaged is still significant. Some items from Leonora, including a working Pianola and a weightlifting machine, have also been obtained for the museum display.

8. Lookouts

There are two lookouts providing vantage points for the present-day mining operations, one is located near the Assay Office and the other near the wood line train.

The open cut is almost 300 metres deep and almost 1km across. The open cut follows around the original Sons of Gwalia shaft, which together have produced over 5 million ounces of gold. In 2006 St Barbara Mines proceeded towards the Gwalia Deeps entering via a decline tunnel (The Hoover Decline) located 125 metres below the swimming pool. It is estimated that the Gwalia Deeps has a potential yield of over 1.5 million ounces of gold but it is located over 1 kilometre beneath the surface.

9. Assay Office

Constructed in 1898 this substantial brick and corrugated iron structure has a hipped roof and a skillion connection (lean to). The prominent brick chimneys were constructed to service the assay furnaces which were required to determine the quality of gold in the ore obtained from the mine.

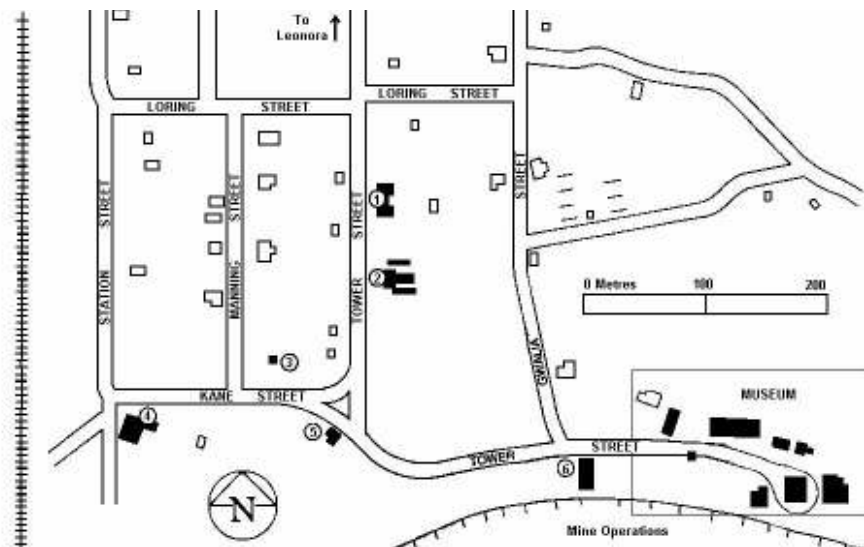


Gwalia Town Site



History

Gwalia is a unique heritage site that has national and international significance, yet the quiet, almost deserted Gwalia town site was once the home of around 1,000 people in the late 1890s. They came from all around the world, as most people did to this region, for the gold and its promise of wealth. They disappeared when the Sons of Gwalia mine closed in 1963 which at that time was probably the sixth largest gold mine in Australia's history and one of only two mines outside Kalgoorlie-Boulder's 'Golden Mile' to produce over two million ounces of gold. In the 1950s the company, very belatedly, recognised that one of the problems of its decline was that people were no longer prepared to raise families in the earth-floored corrugated iron buildings erected by the miners in the early days. Despite new facilities that were introduced, and support from the State Government, on Friday December 13th, 1963 it was announced



that the mine would close on New Year's Eve. The population of Leonora and Gwalia was about 1,700 at the time and a mass exodus to work on other mines began. On January 17th, 1964 the Gwalia Hotel closed its doors on a town that by then had only 40 residents. Today the town still has a small population of around 12 people.

1. Mazza's Store

Please view from the outside, as the structure needs further conservation.

Around 1910 this multiple-gabled structure was moved from Laverton to the 'Gwalia Block' (Next to the State Hotel). The timber frame, which is constructed with half Oregon timber and half jarrah, is clad in corrugated galvanised iron and lined with ripple iron. The shop front is protected by a prominent full-length verandah. The store was initially operated on the 'Block' by J.A. Willson & Co. When Mr Victor Mazza and his family bought the store in 1949 all that remained at the Gwalia Block, once a thriving business centre, was the barber shop and general store. After trading on the former site for 8 years, Mazza's Store was moved by jinker (a large, two-wheeled trailer) to this location and continued to trade until its closure in 1964. For more than 50 years, this store provided almost all of the town's supplies. Truly a 'one-stop shop', it sold everything from soap to ammunition.

Opposite Mazza's Store two typical Gwalia cottages can be seen. Both are gabled structures, constructed with timber frames and galvanised iron cladding but one is somewhat more sophisticated and features a bullnose verandah and has a gabled extension at the rear.

2. Patroni's Guest Home

This complex of several dwellings and a multiple-gabled main building was constructed with a timber frame and galvanised iron cladding and features a latticed verandah on the main building. Most of the miners who came to Gwalia were single men and guesthouses such as this were built to accommodate them. Even those fortunate enough to live in homes of their own frequently ate their meals here, as many of the Gwalia houses did not have kitchens or water facilities. The average cost of the meals was around 30 shillings a week — roughly one third of the average miner's wage.

3. Little Pink Camp

Little Pink Camp is a good example of the resourcefulness of mine workers, who constructed their houses using whatever materials were available or cheaply obtained. This tiny dwelling, built of timber and corrugated galvanised iron, is known for its decoration and the unusual construction of three rooms, and still has remains of its original hessian walls, papered with newspapers. Unlike many of the Gwalia dwellings it has a plank, rather than dirt, floor.

Many Gwalia residents kept goats to supplement their food source. Even more kept poultry and there are many remaining examples of identically built pigeon or fowl houses left in the town. Some of these appear to have been built with more care than the houses themselves.

As part of a relocation program to conserve buildings which were situated very near the mine's overburden dump, Little Pink Camp was moved here in 1988.

4. State Hotel

Gifted to the Shire of Leonora in 2023 by St. Barbara Goldmines. The Shire hopes that in coming years this will be refurbished & reopened as a function centre & for accommodation.

This was the first and last to operate of the chain of Government-owned State Hotels in Western Australia. Demand had long been high for a hotel in Gwalia, but no private establishment would build in the town without a freehold title. Eventually, in 1903, the Government built the State Hotel to give the town a licensed premise and in the hope of decreasing the sly-grog trade.

The two-story brick hotel is one of only four brick buildings remaining in the town. It was designed by the architect William E. Robertson and built at a total cost of £6,000.

Since there were few places nearby to spend money, the State Hotel earned a steady income for the Government. It was sold to a syndicate of local residents in 1960, which ran the hotel until its closure in 1964.

In March 1919 what is thought to have been the State's first Beer Strike occurred in Gwalia. Fifty residents voted for a Beer Strike and vowed not to return to the hotel until their conditions were met. They had carefully compiled a list of complaints, including some relating to the brand of beer offered, the price, size and cleanliness of the glasses, and the behaviour of the manager whom they insisted should be dismissed. The boycott ended in September, although the number of sly-grog prosecutions continued to steadily increase. During the boycott Gwalia was hit by a pneumonic influenza epidemic and the Health Department commandeered the empty hotel as a hospital during this emergency.

5. Art's Place

This cottage was restored to its present state in 1986. Like most of the cottages built in the area it is a gabled construction with timber frames, corrugated galvanised iron cladding and is cloth-lined. The last occupants of the building were the Lovi family. It became known as Art's Place in about 1980 after a local, Mr. Arthur DeKlerk, carried out some repairs to the structure after it had been damaged in strong winds.

6. Swimming Pool

Sometime after a huge fire in January 1921, a substantial government loan paid for extensive rebuilding, and prosperity and employment gradually came back to Gwalia. As part of this redevelopment a swimming pool was opened in 1942. Its main purpose was to serve as a good head of water in case of fire but it also provided a welcome community facility and was very popular with residents.