

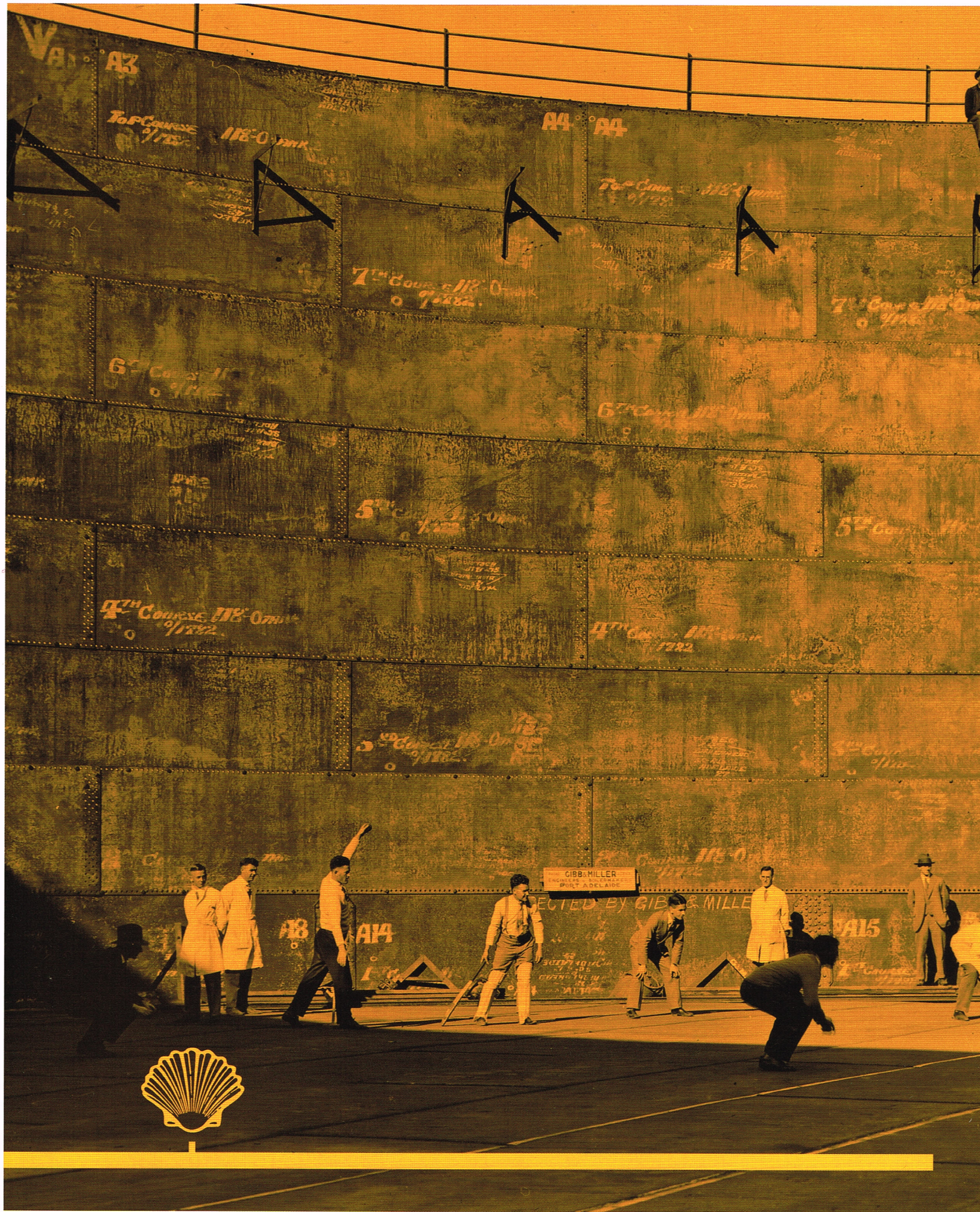


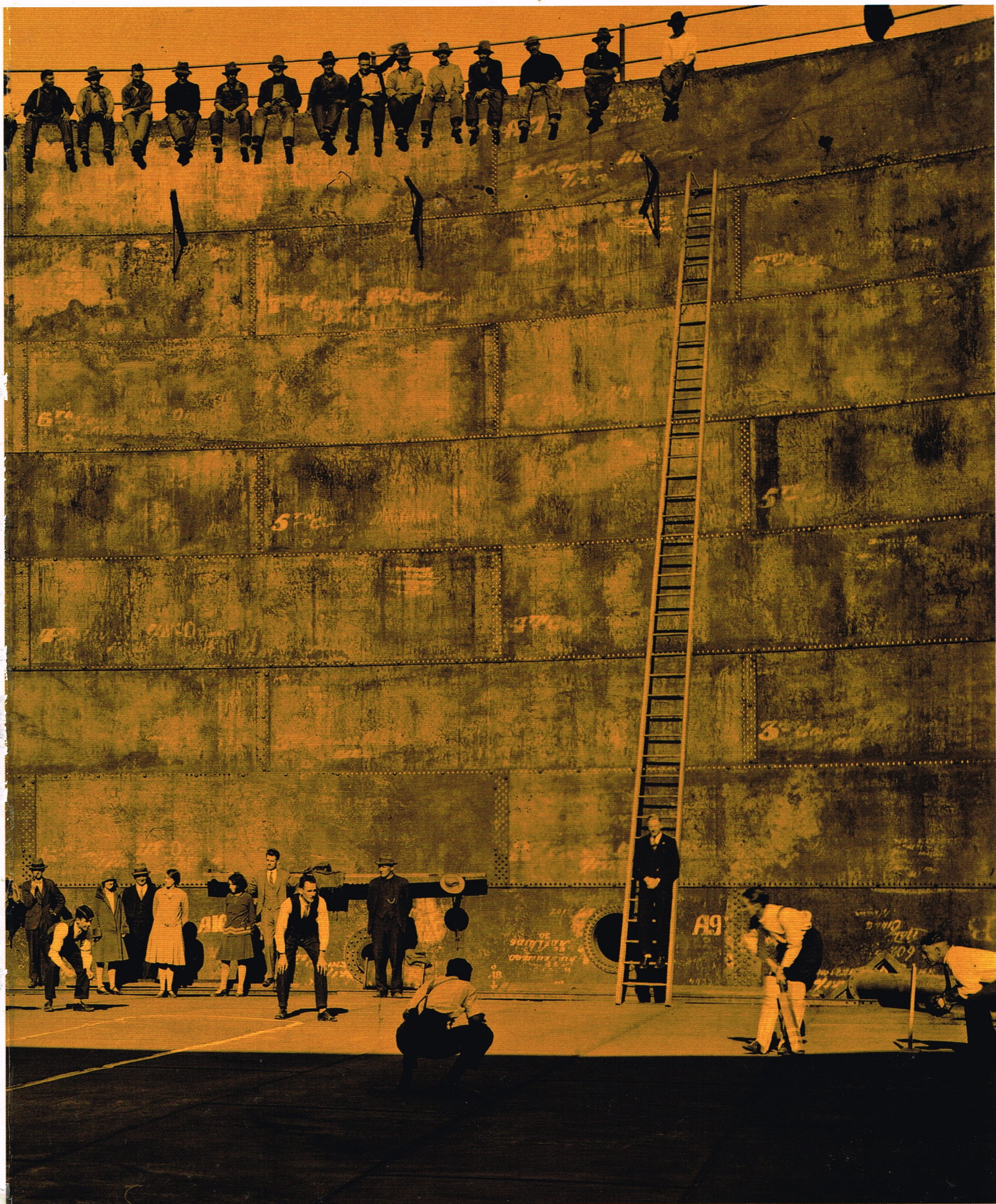
TIN MADE IN
AUSTRALIA

TIN MADE IN
AUSTRALIA

...from kero tins
to LNG tankers...

Shell
100
1901 - 2001







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Shell continues to challenge the status quo so Australia will reap the greatest possible benefits from future energy developments well into the 21st century.

In the beginning

In 1901 one of the enduring images of life in Australia was the ubiquitous kero tin. Holding kerosene was only the first of its uses. It doubled as a bucket for firewood, vegetables or stock feed, a nest for hens, a wicket for cricket and a pot for salting meat or boiling puddings.

Flattened out, its sheets became fowl houses or woodsheds or, in extremes, shelter for people. Gradually after World War II, the four gallon, box-shaped tin and its contents disappeared in favour of cylindrical containers of different sizes, petroleum products more varied and precise than kerosene, and ever more bulk handling.

Shell's arrival in Australia at the very beginning of the 20th century was immediately connected with the fate of the kerosene tin. Shell was the radical new supplier of Asian bulk fuel competing with the historic source of tinned and cased kerosene – the fabled Standard Oil from across the Pacific.

One hundred years later at the turn of another century, majestic liquefied natural gas (LNG) tankers dominate the skyline and sea lanes between Australia's remote north west coast and Japan, Asia-Pacific, Europe and USA. Each has four, 40 metre diameter, insulated, spherical aluminium tanks protruding above deck level and delivers pure, clean LNG from Australia's vast reserves.

As a joint venture participant in Australia's largest ever single commercial undertaking – a \$12 billion privately-funded venture to develop the North West Shelf source of natural gas – Shell continues to challenge the status quo so Australia will reap the greatest possible benefits from future energy developments well into the 21st century.

*Front cover -
Shell tins used to clad the house of
Horatio Jones in the Dandenong Ranges.*

*Inside front cover -
Anyone for cricket?
This match was played in 1930
on a full-sized pitch in a Shell tank
being constructed at
Birkenhead Installation Adelaide.*

1816

- On 8 October, John Macarthur is granted 850 acres of land by the Crown to establish Elizabeth Farm, the home of Australia's merino sheep. Today, it is the site of Shell's Clyde refinery

1833

- Marcus Samuel senior establishes bric-a-brac shop in London's East End

1847

- Paraffin (kerosene) lamp invented

1859

- Edwin Drake's first well in Pennsylvania strikes oil

1863

- USA exports two million gallons of oil to Europe

1870s

- In the American oil rush, Standard Oil (Ohio) Company under John D. Rockefeller grows rapidly through a series of mergers

1885

- Karl Benz invents the first motor car

1890

- USA exports 700 million gallons of oil to Europe
- 'Royal Dutch Company for the Working of Petroleum Wells in the Netherlands Indies' forms

1892

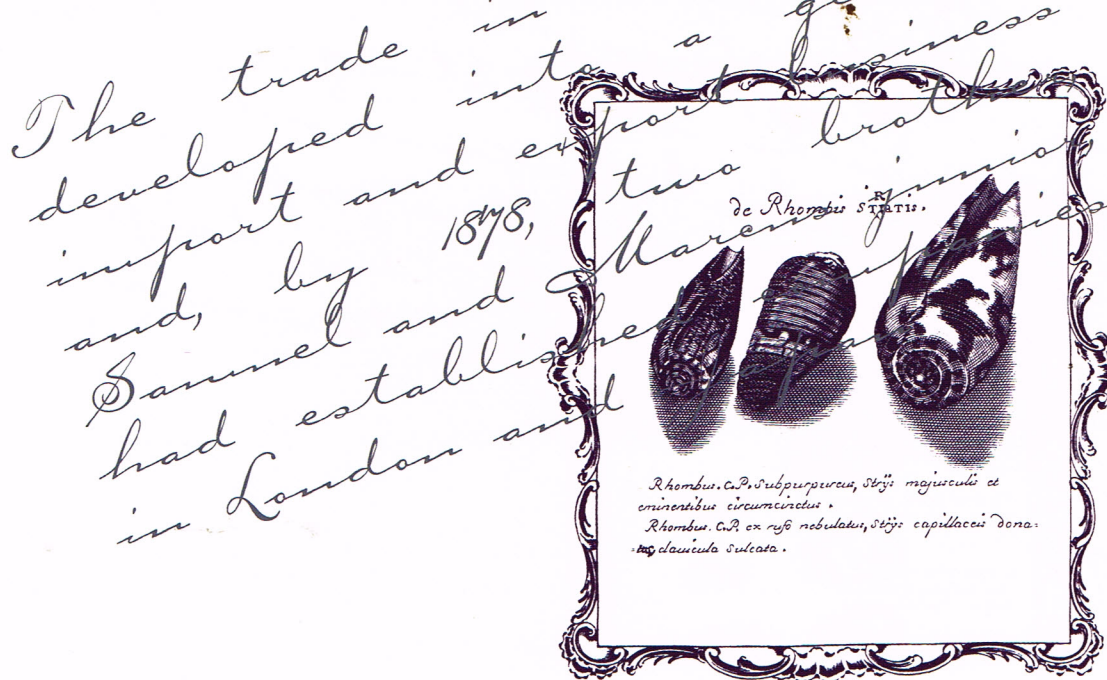
- London firm of Marcus Samuel & Company begins buying kerosene for sale in the Far East using the brand name 'Shell'
- Royal Dutch Company's first refinery in the Netherlands Indies begins operation
- Marcus Samuel launches his first tanker, Murex, 95,101 tons

1897

- Marcus Samuel forms The 'Shell' Transport and Trading Company Limited

1900

- Standard Oil (Ohio) Company becomes the largest industrial enterprise in America



Origins of Shell

SHELL ORIGINATED IN THE CROWDED EAST END OF LONDON IN 1833 WHEN MARCUS SAMUEL SENIOR OPENED A SMALL WORKSHOP WHICH MADE AND DEALT IN CURIOS. HE BOUGHT EXOTIC ORNAMENTS, ESPECIALLY SEA SHELLS, FROM SEAMEN, TO DECORATE HANDIWORK SUCH AS SMALL SHELL-COVERED CONTAINERS AND MIRRORS THAT WERE POPULAR IN VICTORIAN TIMES.

The trade in shells soon developed into a general import and export business and, by 1878, two brothers, Samuel and Marcus junior, had established companies in London and Japan. They imported the first mechanical looms into Japan and, under Sam's direction, imported British machinery, textiles and tools and exported rice, coal, silk, china, lacquer ware and copper for sale in other parts of the Far and Middle East as well as Britain and Europe. Simultaneously, under Marcus junior's direction, the London end of their operation traded in other commodities worldwide, particularly sugar, flour, wheat, tapioca, shells and – not too much later – oil products.

Marcus concentrated his attention on the problems of transporting oil products, including the waste in freight expenditure and costs of handling barrels, tins and cases. In 1892 the brothers built the *Murex*, the first tank steamer to travel through the Suez Canal with a cargo of bulk benzine. Another seven tankers were ordered – each named after a sea shell, beginning the tradition that continues today – and bulk oil storage was set up at various ports in the Far East. To ensure long-term supply, Marcus Samuel

entered into a contract with a group of Russian producers and refiners controlled by the Rothschilds.

In a parallel development, the forerunner of the Royal Dutch Petroleum Company was involved with petroleum produced in the East Indies. By 1892, it had set up – in Sumatra – a pipeline and refinery, had tankers constructed and installed bulk storage facilities. The two companies became locked in competition with the giant Standard Oil of USA and this trading battle led to the pooling of interests between Shell and Royal Dutch. In 1903 a joint company, the Asiatic Petroleum Company Limited, was formed.

It was almost inevitable that Shell, with its major asset of fuel oil, and Royal Dutch, with huge supplies of gasoline would merge – which they did in 1907.

The word 'Shell' first appeared as the trademark in 1891 for kerosene being shipped to the Far East. The first appearance of the sea shell emblem was in 1900 when Shell registered a mussel shell emblem as its trademark in Britain (and also in each Australian State). In 1904 it

switched to the scallop shell emblem, with an improved design adopted in 1909.

Since then, the scallop shell has remained the symbol with only slight changes. The design evolved over the decades (1930, 1948, 1955 and 1961), becoming simpler and more graphic as time passed. The current emblem, introduced in 1971, was designed by American graphic designer, Raymond Loewy.

The shell mark was first used for marketing motor spirit or gasoline. This had an early brand name of Mota but Shell Motor Spirit – for which the slogan 'purity, pace and power' was adopted – soon followed as an improved and more specialised product. The amazing 1907 Paris to Peking motor race was won on Shell gasoline.

he trip is a fair one for
derstands his ear, and provided
ipped with a spade, rolls of matting and
pair of rubber boots to negotiate lagoons when
eking a safe track t of signposts
as one of the chief necessities on this trip
nd frequent inquiries necessary to ensure
keeping on the right



Once upon an island

SHELL'S ASSOCIATION WITH THE LARGEST ISLAND AND SMALLEST CONTINENT BEGAN IN THE LATE 1890s WHEN ITS PRODUCTS WERE HANDLED BY AGENTS SUCH AS BURNS PHILP, GOLLIN AND D&J FOWLER. BUT, JUST THREE WEEKS AFTER THE FIRST COMMONWEALTH PARLIAMENT OPENED IN MELBOURNE'S EXHIBITION BUILDING IN 1901, HISTORY WAS CREATED WHEN THE SHELL TANKER, *TURBO*, SAILED INTO PORT PHILIP WITH THE FIRST CARGO OF BULK KEROSENE EVER TO REACH AUSTRALIA.

Anchoring on 3 June 1901 at Hobson's Bay, the *Turbo* discharged into a new tank installation The 'Shell' Transport and Trading Company of London had commissioned on land leased from the Victorian Railways near Williamstown railway station. She then sailed on to Sydney to discharge the remaining cargo into another new Shell tank installation at Gore Bay.

By 1903 the delivery of kerosene in bulk into the interior of Australia was well underway. The *Murex* made the first delivery of bulk fuel oil to Australia.

Shell's general volume of trade grew so much that a subsidiary company, British Imperial Oil (BIOC), was set up in Australia in 1905. The bulk

of trade was in lighting kerosene: the trailblazing product *Rising Sun* was succeeded by *Silverlight*, and, in turn, *Pennant*.

The company proudly boasted that the tins used for kerosene, motor spirit and other products were made in its own Australian plants: the Williamstown terminal in an old converted wool store was capable of producing 2,500 tins and 500 drums a day.

Local tank installations were established in inner Melbourne, Sydney and Adelaide. BIOC district representatives rode bicycles. The early horse and cart wagons had flat tanks of 140 to 225 gallons bulk capacity. Rail wagons of mostly 400 and 600 gallons capacity took kerosene

further afield. Alternatively, these tanks could carry bulk tins. Bulk depots slowly spread to bigger country centres.

Shell's first general manager in Australia, Ernest E Wagstaff, showed the way in braving the hazards of Australia's trackless wastes.

In 1901 he drove from Melbourne to Sydney and in 1908 he drove the first heavy car, a chain-drive 24 horsepower Daimler, across the sandy Coorong desert in South Australia to open a way from Sydney to Adelaide.

In the middle of the Coorong he met another pioneer motorist, Bertie Barr-Smith. Barr-Smith had run out of whisky and Wagstaff had run out of water. Mutually beneficial barter followed.



According to Wagstaff, it was quite an eventful journey and many times he and his companion had to shovel deep sand away to make a track. He said: "The trip is a fair one for any motorist who understands his car, and provided he is equipped with a spade, rolls of matting and a pair of rubber boots to negotiate lagoons when seeking a safe track. The want of signposts was one of the chief difficulties on the trip and frequent enquiries were necessary to ensure keeping on the right road."

Shell followed Wagstaff's lead and itself tested the possibility of motor transport under adverse conditions. Its tank motor lorries pioneered many routes previously not travelled by commercial motor vehicles.

Many of the remote Shell depots were in desolate sandy or rocky country. The difficulties surmounted by camels and six-wheel motor trucks ensured regular supplies of fuel to isolated centers.

Another contribution Shell made to transport in remote areas was by supplying maps and information on water supplies, shelter and obstacles in unexpected places. This enabled business people, tourists, prospectors, other motorists and aviators to travel in comparative safety. Even by 1928, these were the only authentic guides to many of the outback parts of Australia and were available free of charge at any of the company's offices.

Shell supplied fuel to the great Antarctic exploration parties which used motorized exploration vehicles. In 1911 a young clerk at the Williamstown installation came face to face with Captain Robert Scott as he loaded supplies aboard the *Terra Nova* for his last tragic expedition; Scott perished in Antarctica the following year.

Shell supplies also went with the *Aurora* which took Douglas Mawson's 1911-14 expedition to Antarctica and then rescued the ship-wrecked British party led by Sir Ernest Shackleton.



- Above clockwise from left -
- EE Wagstaff and companion crossing the sandy Coorong in 1908 to open up a way from Sydney to Adelaide.
 - On his Shell-supplied 1930 Antarctic expedition, Sir Douglas Mawson called at his old winter quarters and found some 1911 Shell Spirit still in excellent condition. It was for the first time ever taken to the polar regions.
 - Early Shell advertising, 1916.

Camel wagon delivering fuel supplies to isolated areas.



*A 'good stretch' had a
strip of 'metal' - packed
stones - down the middle.*

moving around

Australian roads in the early part of the 20th century barely existed. Even the best of roads were dirt tracks or pot holes filled with dust or mud according to the season. An 'unmade' country road was usually three ditches, the centre one formed by the constant pounding of horses' or bullocks' hooves, the outer ones by the iron tyres of the vehicles they pulled.

Floods could turn roadways into swamps for weeks, bridges could not be depended upon, grades on the hills were rugged. A 'good stretch' had a strip of 'metal' - packed stones - down the middle.

Up until the 1920s there were no Shell - or other oil company - service stations to supply fuel and spare parts. Motorists bought motor spirit, or petrol, from the blacksmith, general store or the cycle shop and, sometimes, carried as much as 20 gallons emergency supply of motor spirit.

They also lubricated their own cars and were their own mechanics as crank cases were likely to be ripped out by rocks or stumps, tyres blown out on rough roads under hot sun.

In the long overland hauls, bullock and camel wagons existed until well into the 1930s. Four-legged traction continued in the cities until the 1930s, but Shell introduced its first bulk motor tankers in 1921: Thornycrofts with solid rubber tyres. The number of motor trucks increased rapidly when bulk delivery began in 1926.





"Down he goes." At the Shell Wharf, Newport, Melbourne. A member of the crew "Turbo" fitted with a gas mask, about to inspect the petrol tank.

FIFTEEN ACRES OF VACANT WHEAT Paddock ON THE BANKS OF THE YARRA RIVER AT SPOTSWOOD/NEWPORT WAS THE BEGINNING OF A NEW SHELL BULK DISTRIBUTION TERMINAL IN MELBOURNE IN 1914: IT WAS IDEAL FOR SHELL'S NEEDS BECAUSE OF READY ACCESS TO BOTH WATER AND RAILWAY TRANSPORT.

Even before the Newport facility became completely operational, it attracted attention from an unexpected quarter. With Australia at war, the Federal Government, realising the installation's strategic significance in maintaining vital national fuel supplies and fearing sabotage or even direct attack from German submarines, placed the entire site under the control of the Royal Australian Navy. Construction gangs worked under the watchful eyes of armed sailors who patrolled the perimeter 24 hours a day.

Before the end of 1916, the first three storage tanks had been rivetted together ready to receive bulk products. The rivets were heated to a bright red heat in small forges on the job. The rivetter's assistant would pick them up with pliers and throw them to the rivetter who would catch them in a small can from which he would pick them up with pliers and insert them in the holes. The assistant held a heavy bolster 'dolly' behind the rivet while the rivetter used a pneumatic hammer to 'set' the rivets from the other side. The rivetters and the equipment moved up as the tank height increased.

The petroleum cargoes were unloaded from each ship at the nearby wharves using a system of steam-driven pumps. In the interests of safety,

the pump boilers were on the nearby river bank, rather than on board the vessels. A separate plant, run by a generator driven by a large Campbell diesel engine, supplied electrical power for the terminal itself.

Once onshore, individual products were decanted from the holding tanks into four gallon tins and the tins were packed in pairs into pine wood cases for distribution.

The Newport workforce, exclusively male due to the manual work, numbered about 60 in its first years. The men worked in shifts, with Saturday part of the normal working week. Outside the terminal, products were distributed in horse-drawn vehicles and Shell had a large team of draught horses at its stables in Melbourne and Sydney.

In the West, the first Shell depot was established in West Perth and Shell products were regularly railed to all parts of the State. But the energy of these early pioneering years was dampened during the first World War as the hardship of rationing took hold.

Kerosene-operated lamps gave way to candles; tractors stood idle and proud automobile owners went back to the horse for transport. Rationing ended in Western Australia

in 1920, about the same time petrol pumps, known by their American trade name of 'Bowsers', were being installed by a few commercial users.



Clockwise from top left -

- *Delivery teams from the Fitzroy depot, Melbourne in 1913.*
- *At the Shell wharf, Newport, a member of the crew of the Turbo, fitted with gas mask, is about to inspect the petrol tanks.*
- *Sir Ernest Shackleton's 1915 expedition to Antarctica.*
- *Shell Aviation Service began in 1919.*



1901

- Queen Victoria dies
- The first Commonwealth Parliament opens in Melbourne's Exhibition Building
- The first motor cars (no more than 50) appear on the city streets
- Electric light introduced in Australia

- The 'Shell' Transport and Trading Company of London commissions bulk handling facilities at Gore Bay in Sydney Harbour and on land leased from the Victorian Railways near Williamstown Railway Station on Hobson's Bay

- Shell ship Turbo arrives on 3 June with the first cargo of bulk kerosene (Rising Sun brand of Russian origin) ever to reach Australia

1903

- First delivery of bulk fuel for Australia arrives in the Murex



1905

- The Shell Transport and Trading Company and the Royal Dutch Petroleum Company establish British Imperial Oil Company Ltd in Australia as a joint venture

1907

- Shareholders agree to Royal Dutch and Shell combining operations, 60 per cent Royal Dutch and 40 per cent Shell Transport

1909

- The Model T Ford arrives in Australia
- The Kitchen family establishes Neptune Oil Company to handle its oil business

1910

- John Fell & Co buys oil from Gore Bay for processing at its refinery next door



1913

- John Fell & Co acquires the assets of the Commonwealth Oil Corporation and begins refining shale oil at Newnes (NSW)

1914

- The Neptune Oil Company sold to the Lever Group
- Euplectela delivers first bulk cargo of motor spirit to Australia

1916

- Shell announces bulk delivery to garages equipped with pumps
- Famous 'Bowser' kerbside pump introduced
- John Fell establishes a shale oil refinery (later Shell's Clyde refinery) at the confluence of the Parramatta and Duck Rivers, 16 kilometres west of Sydney

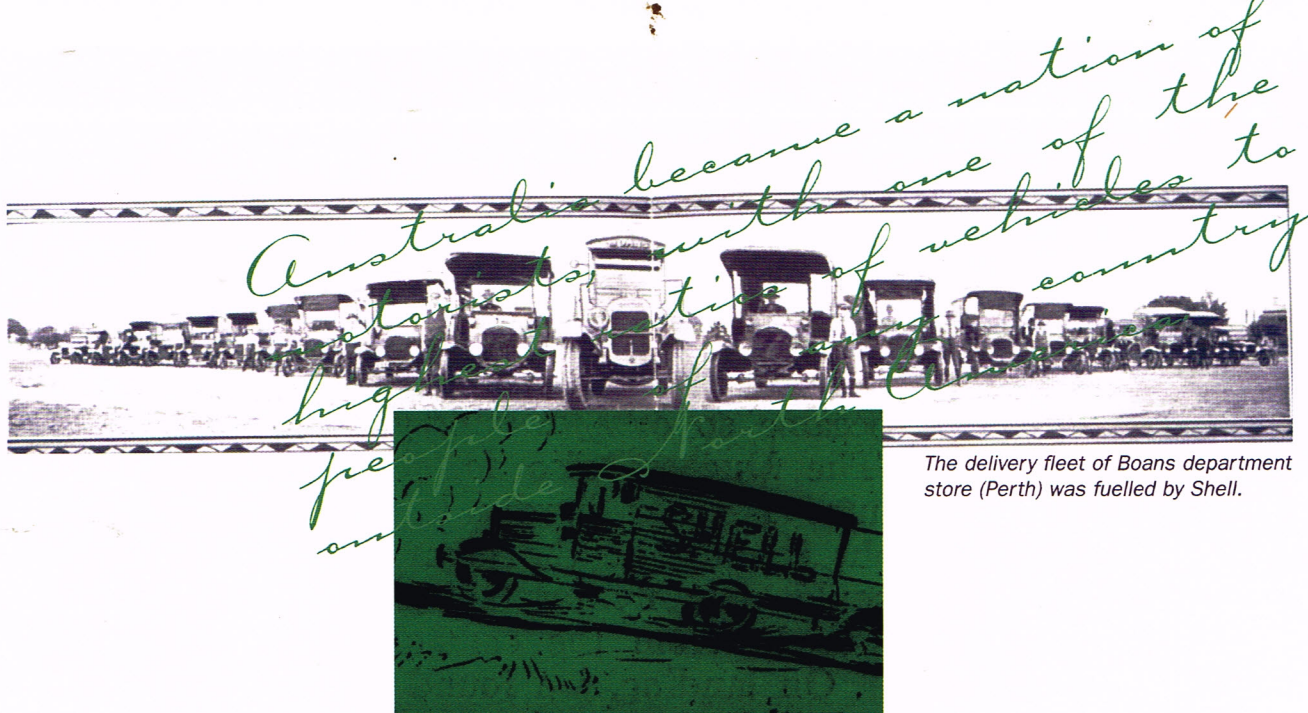
1919

- Shell Aviation Service starts

AGAIN! SHELL BENZINE
FOR SIR ERNEST SHACKLETON'S
ANTARCTIC EXPEDITION 1915.

Refuelling an early taxi during a trip from Melbourne to Darwin.





The delivery fleet of Boans department store (Perth) was fuelled by Shell.

Making tracks

THE ELEVEN YEARS BETWEEN THE END OF WORLD WAR I AND THE GREAT DEPRESSION SAW THE OIL INDUSTRY AND SHELL AUSTRALIA ASSUME THE SHAPE THAT WOULD BE RECOGNISABLE FOR THE REST OF THE 20TH CENTURY. AUSTRALIA BECAME A NATION OF MOTORISTS, WITH ONE OF THE HIGHEST RATIOS OF VEHICLES TO PEOPLE OF ANY COUNTRY OUTSIDE NORTH AMERICA.

The forces at work since 1900 flowered in a period of enormous development: bulk petrol deliveries by truck to kerbside pumps; display advertising on the roadside and in the daily press; passenger airlines; asphalt (now known as bitumen) for the nation's dusty roads; refining; the search for Australian oil; intense competition between well-known brand names – all became a regular part of Australian life.

"Only about 25 years ago," wrote the editor of the first issue of Shell's house journal *Together* in 1930, "motor cars began to make their appearance in Australia.

"They were looked upon as luxuries, as rich men's toys, those high-set, stiff-backed machines which made a noise like a stone crusher every time their begoggled drivers changed gears. Today, motor vehicles – lordly limousines, rakish racers, bouncing 'babies' and Titanic trucks, not to mention the ubiquitous 'bike' – are running over the length and breadth of the Commonwealth to the tune of more than six hundred thousand."

In 1925, the most revolutionary step ever taken in the history of oil marketing in Australia

was when Shell began its conversion to bulk trading. Storage facilities were constructed across the country and land was bought for a string of country depots. Rail sidings and tanks were built to allow main country depots to convert to bulk handling, with motor trucks delivering product locally.

Motor transport linked up the railway systems of Australia and made it easier – and cheaper – for families on the land to obtain materials and spare parts for machinery, as well as to carry loads of wool and wheat to markets.

But Australia was also a country of brands. It was not uncommon to see a range of different company pumps outside a general store. There were genuine, though not huge, differences in performance between brands.

Shell sold on quality and the wide availability of product and, in an almost overnight move during November 1926, installed hundreds of company-owned kerbside pumps and leased them to dealers for a low deposit and rental. The planning for the move, one of Shell's many 'firsts', was cloaked in secrecy.

In 1902, the total Australian consumption of the principal petroleum product, kerosene, was 1.4 million gallons. In just 21 years the figure rose to 99 million gallons and included motor spirit, crude oil and lubricating oils. By 1926, it more than doubled to 210 million gallons.

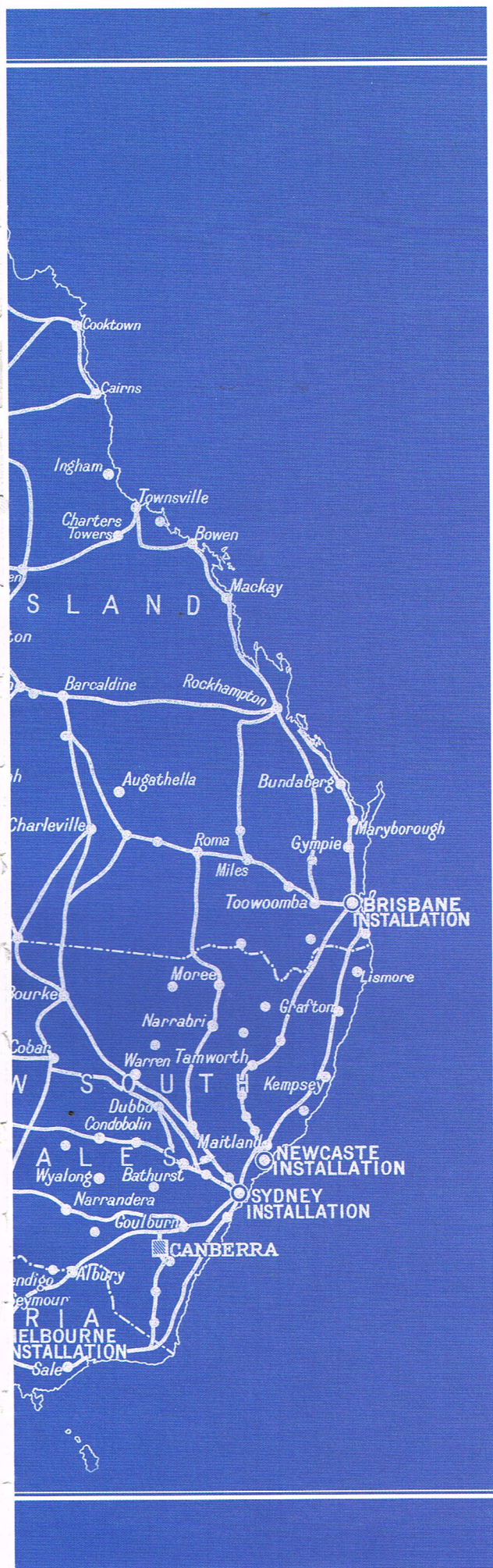
During the '20s, lubricants spurred the establishment of laboratories at Newport, Gore Bay, Brisbane, Birkenhead and North Fremantle. The laboratories analyzed and checked the quality of Shell and rival lubricating oils. This was followed by analyzing petrol and other products to improve consistency and, where possible, learn from competitors.

It was also the start of what was often called bitumen or asphalt or tar and Shell's *Mexphalte* brand became popular, joined by *Colas* in 1929.



There were seven Shell coastal installations to store motor spirit, kerosene, lubricating oil and oil fuel at Sydney, Melbourne, Adelaide, Brisbane and Newcastle.

north, south, east and west

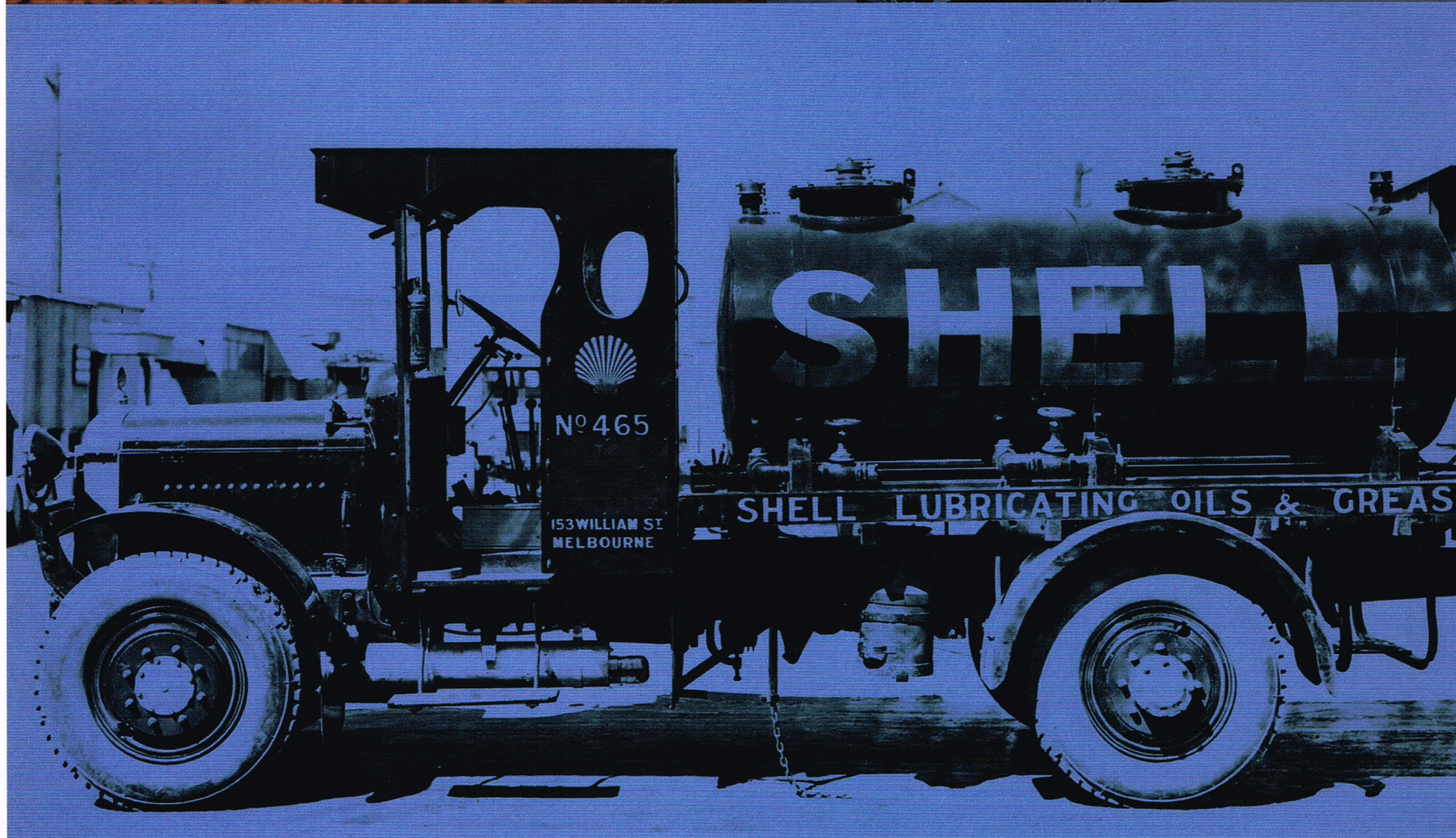
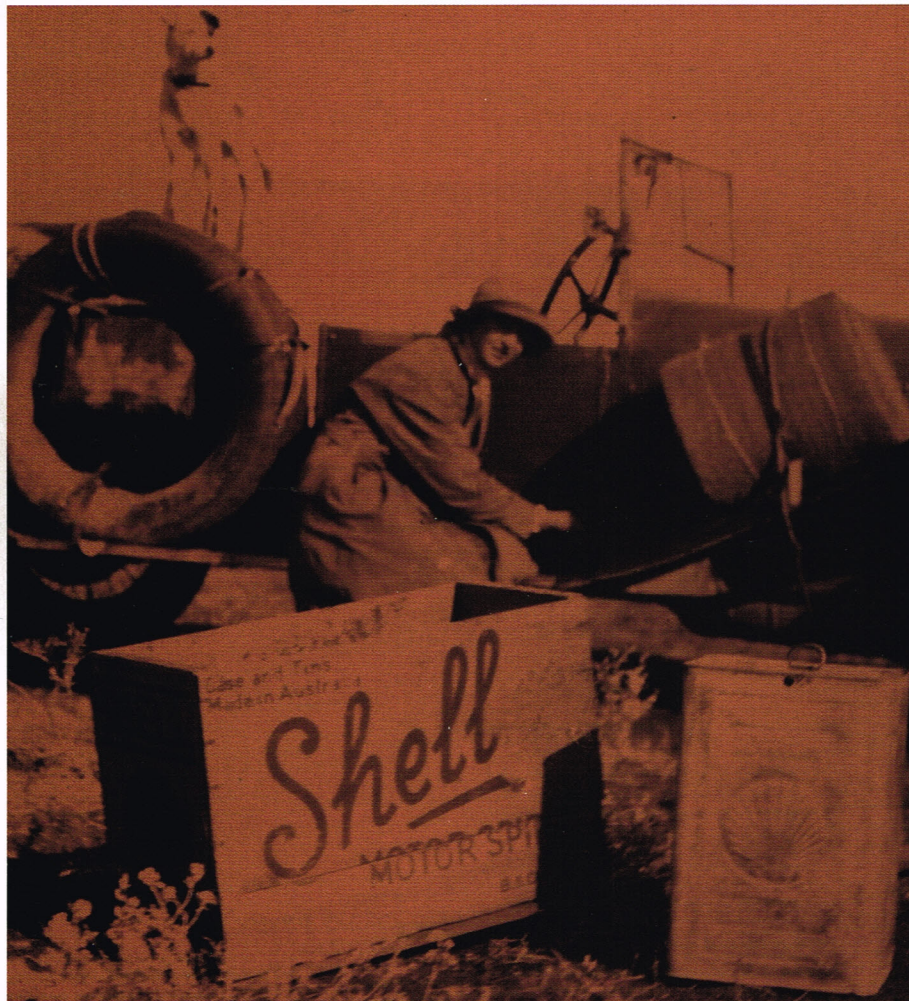


By 1928, Shell had organised its system of oil distribution over the whole Commonwealth – in the great unpopulated and, in many cases, unexplored areas of central and northern Australia and in the isolated and sometimes remote pastoral and agricultural districts in every State, as well as the cities and larger country centres.

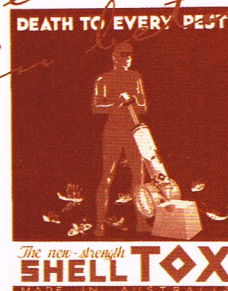
There were seven Shell coastal installations to store motor spirit, kerosene, lubricating oil and oil fuel at Sydney, Melbourne, Adelaide, Brisbane, Fremantle, Hobart and Newcastle.

A chain of depots made it possible for regular motor and air transport to be maintained through the length and breadth of the continent.

Petrol dumps were established at telegraph stations, cattle and sheep stations and other points on the principal overland tracks. Shell's own motor lorries pioneered many routes and six-wheeled motor trucks and camels and other animals were used to transport fuel to isolated centres.



In the early '30s, to drive and a half days from Newport to Mildura: speed was limited to 12.5 miles an hour; the road had a bitumen strip at either end, with Mallee sand in between.



Left - Illustration from a Shell touring guide
Right - Shell advertising from the 1930s

SHELL'S FIRST MAPS IN THE 1920s, WHICH DOUBLED UP AS ROAD AND AVIATION MAPS, WERE OFTEN THE WORK OF VOLUNTEERS. IN 1927 KATHLEEN HOWELL AND JEAN ROBERTSON OF MELBOURNE DROVE FROM MELBOURNE TO DARWIN AND BACK THROUGH THE BARKLY TABLELAND AND BRISBANE.

In return for Shell providing the fuel, they drew a map of the route from the farmland north of Adelaide to Darwin and back far as the Barkly Tableland, where their speedometer gave up.

The map they started with was one of Australia so they mostly followed the telegraph line or wheel tracks through the sand. They carried camping gear but slept most nights at pastoral or telegraph station homesteads.

Between Melbourne and Darwin, they only sustained one puncture. They also lost a pair of scissors on the Barkly Tableland, 70 miles west of Anthony's Lagoon and 100 miles from Newcastle Waters, the next habitation. The scissors turned up months later when a punctured truck tyre was being repaired in Darwin.

The Shell maps that followed such pioneering trips resembled blueprints for building or engineering. After the Depression eased, Shell moved to more graphic presentations and touring guides and, eventually, coloured road maps.

Shell's fleet of motor trucks grew from the early 1920s with numbers increasing rapidly when bulk delivery began in 1926. Usually Shell imported the chassis, engine and transmission and had the cabin, tray and tank built locally.

Workshops at the main installations then painted the truck and applied finishing touches. The tanks were yellow, the cabins and insignia red and the chassis black. The livery design was international and came from London, but

Australian painters applied it, including the fine gold sign-writing. The drivers were issued with uniforms: khaki shirts, ties, slacks, jackets and caps. They were considered to be the smartest drivers in town.

The early tank-trucks only had a capacity for up to 500 gallons. Trailers carrying six 44-gallon drums were common but by the late 1930s, 1500 gallons was standard, as were semi-trailers. The trucks at country depots often had a removable tank and could be converted readily to a tray top.

In the early '30s, it took three and a half days to drive a Shell truck from Newport to Mildura: speed was limited to 12.5 miles an hour; the road had a bitumen strip at either end, with Mallee sand in between.

The trucks were much less reliable than in later times and drivers had to be able to do running repairs and change wheels, as well as put up with noise and discomfort that was reduced over the years. Electric self-starters gradually came in and improved during the 1920s, but starting handles were part of motor transport life until after the second World War.

Shell also had research lorries and waggon (sic) on the road to enable precise comparisons of fuel and lubricant performance under a wide range of operating conditions.

During the Depression period, Shell was a steady employer as many operations were still manual. Grease was packed by hand, using a scoop into

five gallon drums and one pound tins. Shelltox pesticide was blended manually and car polish hand mixed. Other employees sorted and packed cleaner fluids and household oils into containers. The metal tins and wooden cases were made by hand and were manually stacked or loaded.

Shell also used the period to build a new head office and state office buildings. Shell House Adelaide opened in 1932, followed by Shell House Brisbane, Shell House Perth and 163 William Street, next to Shell Corner in Melbourne, in 1933. The Sydney office overlooking Wynyard Square was completed in 1938.

- *Opposite clockwise from top left - On the edge of the 'never never' at Kingoonya, South Australia.*
- *1920s maps resembled blueprints for building or engineering.*
- *Adelaide to Brisbane by bus.*
- *Pneumatic tyres became more common on Shell trucks in 1926.*



IN 1928 SHELL BOUGHT THE ASSETS OF JOHN FELL AND COMPANY, WHICH INCLUDED ONE OF AUSTRALIA'S FIRST OIL REFINERIES ON THE BANKS OF THE PARRAMATTA RIVER AT CLYDE AND THE GORE BAY INSTALLATION, CLOSER TO SYDNEY.

Clyde had a pioneering ambience in the 1920s. The refinery site was unfenced and remained partly bush and swamp. The approach from Unwin Street was almost impassable in the wet weather and the refinery tractor rescued many a bogged driver:

The office in 1930 was a small fibro cement building. There was no sewerage, so carts arrived for the night soil. There was no bus, so staff were picked up from Granville station and they shared a taxi back at night.

The switchboard operator and the typist had to go to the engineer's residence, about 75 metres away, to use the toilet. When it rained, there was a foot or so of water between the office and the house and the girls had to take the car, an open, canvas-topped one.

Shell had tin factories around the country. Usually there was a soldering machine, two cast iron troughs of solder and a big water trough. The machinery row of arms would turn slowly and the tin plate would rest against these, turning over as they moved along. The machine soldered the four sides and two men then ran around the seams with a V-shaped hand iron.

The water trough and air hose were used to test the tins for leaks. Boys then wiped off the

water, stacked the tins ready for going by conveyor to the filling building where machines filled eight tins at a time.

The cap was soldered on, and the two full tins were placed in a pine wood case made on the premises. The case was nailed up with a nailing machine and then stacked or loaded onto lorries.

Smaller tins were also made to hold one gallon, a pint, even down to eight-ounce and four-ounce tins. The four-ounce tins were for household oil, cleaner and lighter fuel and the eight-ounce for household oil.



- Clockwise from top left -
- The opening of the Carnamah 'A' class depot depot, Western Australia, 4 May 1929.
 - Staff dance held at the YAL Hall, Perth, in 1927, to mark the opening of North Fremantle bulk installation.
 - One of the storage tanks at Clyde refinery.
 - The tin factory.
 - Australians found a huge range of uses for both kero tins and cases. Home-made furniture from kerosene cases was so popular that the New Settlers League issued a 'how to' booklet on it in 1925. (Courtesy of S.Kellett, Ringwood, Victoria).



1921

- Shell introduces motorised bulk tankers

1922

- John Fell buys crude oil to refine at Clyde

1926

- Clyde refinery produces casing head gasoline, Dux Motor Spirit, petroleum, coke, tractor distillate, gas oil and Ajax Power kerosene
- The Royal Dutch/Shell Group acquires the Neptune Oil Company from the Lever Group
- Shell installs hundreds of company-owned kerbside pumps and leases them to dealers for a low deposit and rental

1927

- Duck River wharf opens at Clyde refinery to receive crude feed by barge from Gore Bay
- The British Imperial Oil Company Ltd becomes The Shell Company of Australia Limited
- Shell sponsors the silent film The Petroleum Industry

1928

- Shell buys Clyde refinery
- Clyde produces Shell Imperial motor spirit, Cross Power kerosene, tractor distillate and fuel oil

1931

- Commonwealth Government imposes four pence per gallon excise duty on refined gasoline

1932

- Shell sponsors first sound film Large-scale poultry farming, followed by The Dairying Industry (1933), Cars and Motor Cycles (1935)

1935

- Shell Educational Film Library opens and becomes one of the most important channels for film distribution in Australia: hundreds of educational and documentary films made available on free loan

1937

- Shell builds theatrettes in its capital city offices

1939

- Shell Development Australia (SDA) receives first Australian exploration concession
- Shell puts physical resources and staff behind the war effort
- Shell executive heads unit distributing petrol, oil and lubricants to the Australian army and air force

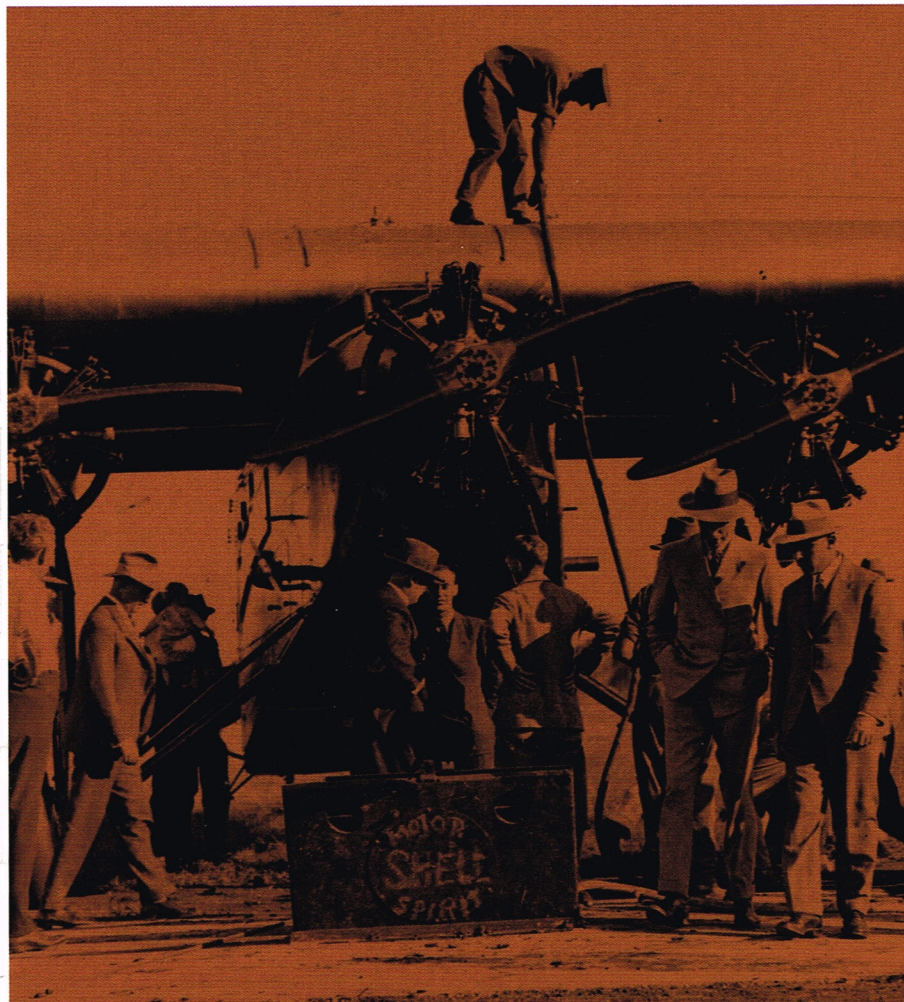
*Shell incorporated aviation
in its bulk distribution system
and had drum depots for
aviation fuel even in the remote
outback*



The age of aviation

SHELL HAD GREAT SUCCESS WITH AVIATION SPIRIT. ITS BEST ASIAN SPIRIT NEEDED LITTLE ADAPTATION FOR THE HIGH COMPRESSION REQUIREMENTS OF AIRCRAFT AND IT MARKETING THE PRODUCT HARD. THE SHELL AVIATION SERVICE STARTED IN 1919 AND THE 1920s SAW COMMENCEMENT OF REGULAR AIRLINES, AIR MAIL AND OTHER COMMERCIAL AVIATION. A MILLION AUSTRALIAN AIR LETTERS HAD BEEN CARRIED BY ABOUT 1927. AVIATORS SUCH AS THE PIONEERING LONDON-AUSTRALIA FLIERS IN 1919, ROSS AND KEITH SMITH, WERE HEROES OF THE DAY AND SHELL DID ITS BEST WORLDWIDE TO SUPPLY, AND ASSOCIATE WITH, SUCH FEATS. IT INCORPORATED AVIATION FUEL IN ITS BULK DISTRIBUTION SYSTEM AND HAD DRUM DEPOTS FOR AVIATION FUEL EVEN IN THE REMOTE OUTBACK BY THE END OF THE DECADE, AS WELL AS BULK INSTALLATIONS AT THE BIGGER AIRPORTS.

Clockwise from top left • A postcard carried on the first Australian airmail in 1914. • Shell staff paid tribute to Amy Johnson with this scroll. • Shell marketed its aviation spirit hard. • Refuelling Kingsford Smith's Southern Cross. • Refuelling the US Air Force in Darwin during joint manoeuvres over northern Australia. • New generation jets and regular jet travel created a huge new market for aviation turbine fuel during the 1960s. Turbine fuel is nearer to kerosene, while aviation fuel used in propeller-driven aircraft was lighter, more like petrol.

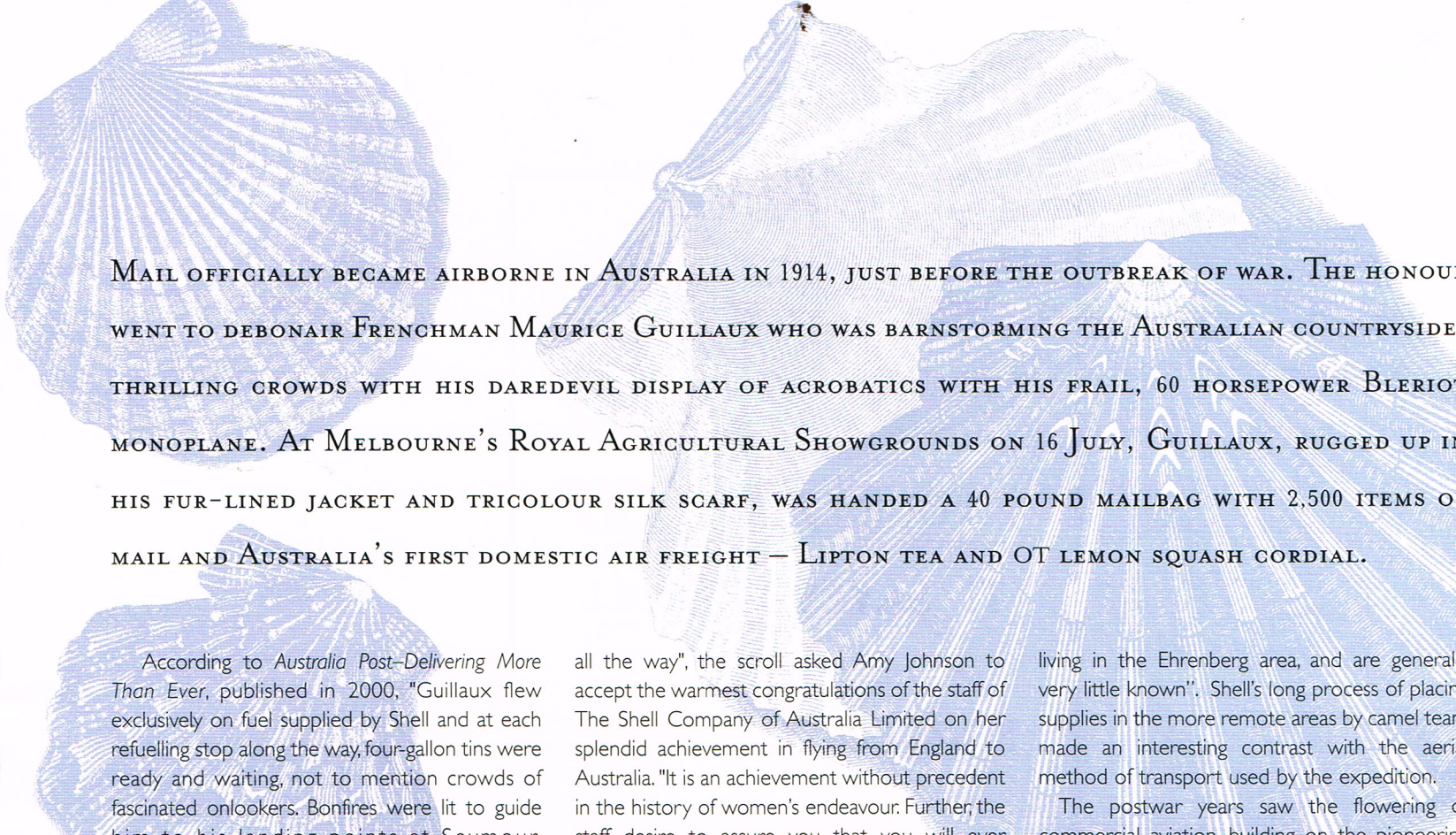


How times have changed! Refuelling an aircraft at Newcastle Waters, NT, during the Thornycroft Expedition in 1929.



By the 1930s every aviator in Australia
flew from Europe to Australia
had used Shell aviation spirit.
Apart from the Smith brothers,
they included Alan McIntosh,
Lieutenant Pater and Pinner and
the Marches and Francis Chichester.





MAIL OFFICIALLY BECAME AIRBORNE IN AUSTRALIA IN 1914, JUST BEFORE THE OUTBREAK OF WAR. THE HONOUR WENT TO DEBONAIR FRENCHMAN MAURICE GUILLAUX WHO WAS BARNSTORMING THE AUSTRALIAN COUNTRYSIDE, THRILLING CROWDS WITH HIS DAREDEVIL DISPLAY OF ACROBATICS WITH HIS FRAIL, 60 HORSEPOWER BLERIOT MONOPLANE. AT MELBOURNE'S ROYAL AGRICULTURAL SHOWGROUNDS ON 16 JULY, GUILLAUX, RUGGED UP IN HIS FUR-LINED JACKET AND TRICOLOUR SILK SCARF, WAS HANDED A 40 POUND MAILBAG WITH 2,500 ITEMS OF MAIL AND AUSTRALIA'S FIRST DOMESTIC AIR FREIGHT — LIPTON TEA AND OT LEMON SQUASH CORDIAL.

According to *Australia Post—Delivering More Than Ever*, published in 2000, "Guillaux flew exclusively on fuel supplied by Shell and at each refuelling stop along the way, four-gallon tins were ready and waiting, not to mention crowds of fascinated onlookers. Bonfires were lit to guide him to his landing points at Seymour, Wangarratta, Albury, Wagga Wagga, Harden and Goulburn. Guillaux's epic 930 kilometre flight took nine and a half hours flying time over two and a half days.

Shell was also there when Hudson Fysh and Paul McGinness founded Queensland and Northern Territory Aerial Services (Qantas). Its first service began on 2 November 1922 when it became the second airline, after Western Australia Airways, to operate in Australia. Qantas grew rapidly, expanding the number of services offered and planes available. In 1934 Qantas made the first international flight by an Australian company from Brisbane to Singapore.

The first plane to be owned and put into operation by an oil company in Australia was the *Gypsy Moth Golden Shell* in 1930. By January 1935, she had clocked up over 80,000 miles, aerial mapping and surveying possible routes and landing grounds, planning fuel depots, enabling the company's own decision-making machinery to run more quickly — in effect, showing the value of aviation to organisations and individuals as the country's development accelerated.

Amy Johnson landed in Darwin on Saturday, 24 May, 1930 after flying solo from England to Australia in 20 days. Shell staff paid tribute to her with an address of welcome in the form of a scroll, hand lettered on vellum. The brilliant colouring of the lettering and decorations included scarlet, green and gold. The binding was blue Niger morocco, hand tooled in gold and lined with watered silk. Headed "Courage comes

all the way", the scroll asked Amy Johnson to accept the warmest congratulations of the staff of The Shell Company of Australia Limited on her splendid achievement in flying from England to Australia. "It is an achievement without precedent in the history of women's endeavour. Further, the staff desire to assure you that you will ever remain in the high places of their regard and admiration."

Amy Johnson's flight was the eleventh successful one between Europe and Australia and all were accomplished on Shell Spirit. She was full of praise for the company's cooperation — and its spirit — as was Maude Bonney two years later when she completed her flight around Australia.

By the 1930s every aviator who had flown from Europe to Australia had used Shell aviation spirit. Apart from the Smith brothers, they included Alan Cobham, Lieutenants Parer and Macintosh, the Marchese de Pinedo and Francis Chichester.

Those pioneering feats fired the public imagination and Shell quickly saw commercial opportunities waiting to be exploited. The company sponsored aircraft displays around the country, participated in pageants, ran training courses in country centres and made a practical contribution of spirit and oil for the flight that made an accurate geographical chart of the 'dead heart' of central Australia, the Mackay Aerial Survey. *Together* magazine of July 1930 reports: "An area of 40,000 square miles, most of which had never been previously seen by white man, has been accurately surveyed and the different features of formation, vegetation, flora and fauna carefully noted. The expedition demonstrated conclusively that the only way to map such country as the interior of Australia is by aerial survey, and collected much valuable data on the Pinto and Eumo tribes of aborigines, which were

living in the Ehrenberg area, and are generally very little known". Shell's long process of placing supplies in the more remote areas by camel team made an interesting contrast with the aerial method of transport used by the expedition.

The postwar years saw the flowering of commercial aviation, building on the pioneering phase and the accelerated advance of wartime. Shell's early cultivation of this field paid off with large shares of a phenomenally expanding market, at first with high octane aviation fuel and then, as jet aircraft took over in the '60s, aviation turbine fuel.

Shell was exclusive supplier to Qantas until the contract was split in the mid-1960s (Shell remains a big supplier) and won a large share of the business with TAA, the Government-owned domestic airline that became part of Qantas.

It maintained especially close links with Ansett, a smallish regional airline that expanded after the second World War. The association goes back to the 1930s when Shell depot staff would have a thermos flask of tea and a sandwich for the founder, Reg Ansett, when he landed at the local aerodrome. When Ansett was expanding in the late 1950s, Shell helped with crucial loans and six months credit for purchases. This led to a 20-year contract for all the Ansett bus and road fuel and half the aviation fuel.

*The fall of Singapore, Broome
Japanese air raids on Darwin, Broome
Port Moresby, injected new urgency and
the Government introduced petrol pooling
in 1942 (until 1948)*



CARRY
YOUR PARCELS
IT SAVES PETROL!
AND
HELPS OUR WAR EFFORT

Authorised by the
Liquid Fuel
Control Board



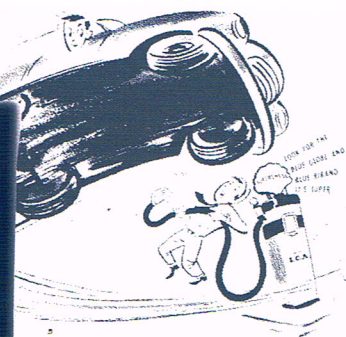
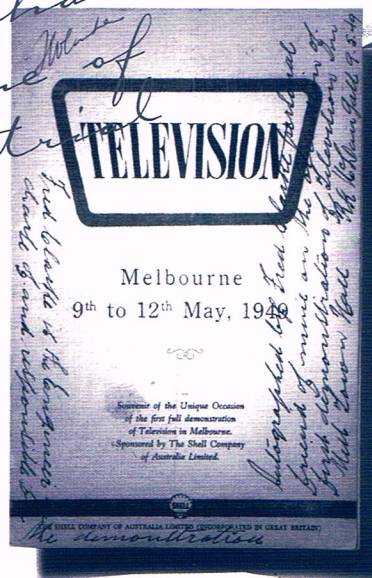
Fuelling the dream

AT THE OUTBREAK OF WORLD WAR II, THE FEDERAL GOVERNMENT TOOK OVER CONTROL OF AUSTRALIA'S PETROLEUM INDUSTRY, SUSPENDING NORMAL REFINING AND MARKETING OPERATIONS. PETROL RATIONING WAS INTRODUCED IN 1940 AND BECAME EVEN MORE STRINGENT AFTER JAPAN ENTERED THE CONFLICT IN 1941 WITH THE BOMBING OF PEARL HARBOUR. THE FALL OF SINGAPORE, FOLLOWED BY JAPANESE AIR RAIDS ON DARWIN, BROOME AND PORT MORESBY, INJECTED NEW URGENCY AND THE GOVERNMENT INTRODUCED PETROL POOLING IN 1942 (UNTIL 1948). THE COMPANIES WITHDREW THEIR TRADE NAMES AND ACCEPTED A PRESCRIBED QUOTA OF BUSINESS. THEIR PRODUCTS WERE POOLED, DISTRIBUTED AND RETAILED UNDER ONE BRAND, SAVING ON SHIPPING, ROAD TRANSPORT AND ADMINISTRATION.



The uses for Shell fuel drums were many.

started of ref the
ild a model for the
ufficient room for that
rable expansion one of
Geelong refinery and
major industrial
lexes in Australia.



NEWS! IT'S SUPER POWERFUL!
PERSHELL
CHARGED WITH **ICA**

by far the most powerful petrol you can buy

ALTHOUGH MUCH OF THE USUAL CIVILIAN MARKET DISAPPEARED IN POOLING, SHELL SUPPLIED MILLIONS OF BARRELS OF FUEL OIL AND LUBRICANTS TO THE ARMED FORCES AS PART OF THE NATIONAL WAR EFFORT. SHELL'S BUILDINGS AND INSTALLATIONS WERE SANDBAGGED, AIR RAID SHELTERS CONSTRUCTED, ADVERTISING EFFORT WAS DIRECTED TO SUPPORT THE WAR EFFORT AND SHELL'S CAPITAL CITY THEATRETTES WERE BROUGHT INTO PLAY, NOT ONLY AS CINEMAS BUT ALSO AS FUNDRAISING CENTRES FOR SUCH BODIES AS RED CROSS AND THE FIGHTING FORCES COMFORTS FUN.

During the war, Shell produced a series of films to convey information and raise morale: *They Serve* (about the Red Cross), *Challenge to Youth* and *Cavalcade of Empire*. The company distributed more than a quarter of a million feet of sound film free each month to borrowers in every part of the Commonwealth.

There is a letter on record from a RAAF chaplain who tells of an audience of 3,000 men 'seated in a tropical downpour in a clearing in the New Guinea jungle, enjoying a Shell Film Show'. One screening at Fremantle wharf for visiting seamen was obviously not without its technical problems: the screen was suspended from one of the gigantic loading cranes, and as well as a large audience on the wharf, decks were crowded and heads protruded from every porthole but the applause voted the evening a complete success.

In the late 1940s it became obvious that the Australian market offered scope for refinery development even beyond what Shell was doing at Clyde where approval was given to add bitumen and low viscosity index lubricating oil plants.

Shell's attention turned to Victoria. Selecting a new refinery site is usually hard work. Unless

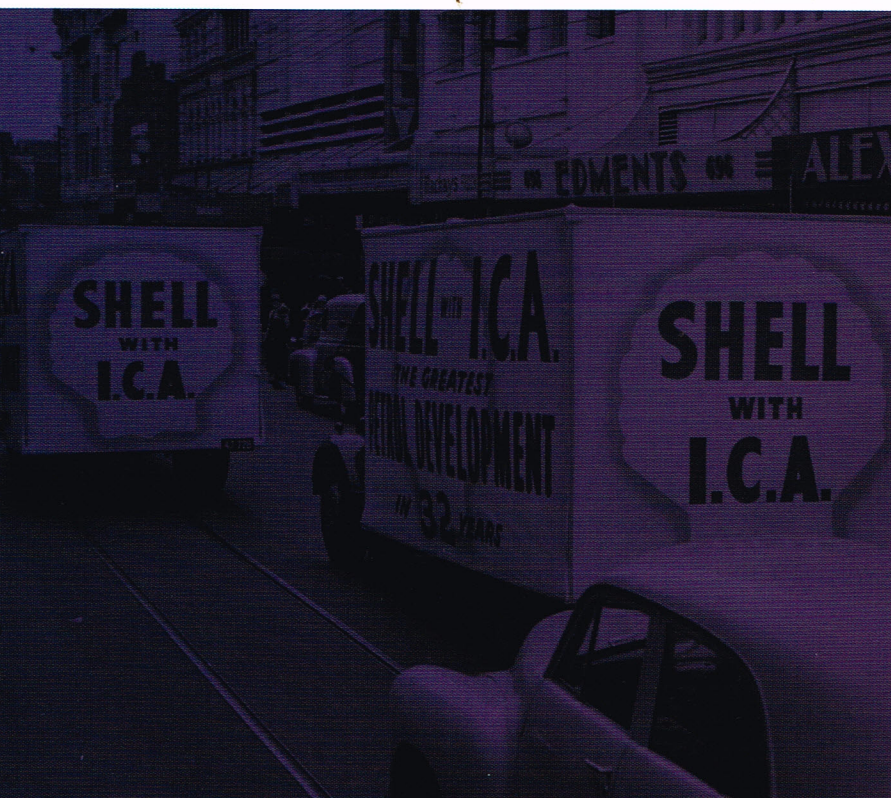
there is an oil field nearby, the ideal site is on a deep water harbour, able to take the largest tankers, but also close to the market and transport network for oil products, as well as to established residential districts for the workforce. There must also be a large area of land available, with space for extension, at not too great a cost. Another consideration is that while people want the refined products, preferably cheaply, they rarely want a refinery for a neighbour.

The choice emerged between Westernport Bay – which had deep water but not much else – and Geelong, which satisfied most of the conditions except for deep water. The site finally nominated was open grazing country with excellent marine, road and rail approaches on the north shore of Corio Bay, five miles from Geelong. The area also had sufficient room for the considerable expansion that made Geelong refinery one of the major industrial complexes in Australia. Shell planned to start from scratch and build a model refinery, without having to adapt any existing facilities to suit its purpose. By happenstance, the components for the new refinery had been lying unpacked on site near Pangkalan Berandan in Sumatra since shortly

before the war. The Japanese invaders did not disturb it but in the uncertain climate after the war, Royal Dutch/Shell feared for the safety of its investment. Eventually, the Group approved funds to develop the Geelong site; Canberra agreed to let the components in free of duty; the Indonesian authorities agreed to it going; and the plant, already complete with pumps, piping, heaters, the electrical power house and even the nails and panes of glass, began to arrive at Corio.

- Clockwise from top left -*
- Shell sponsored the first full television demonstration in 1949.
 - Additives were the main advertising story of the '50s.
 - Shell Ondina Auto Port, Melbourne was one of the first one-brand service stations.
 - Geelong refinery rising out of the paddocks in the early 1950s.
 - The Shell Mobile Film Unit altered the lives of many living in remote communities by bringing them not only pictures, but also lighting, power, portable screens and projectors. Ian Bosworth was just one of many known as the Shell Film Man.





GEELONG REFINERY WAS OPENED ON 18 MARCH 1954 AND PLANS WERE ALREADY WELL IN HAND FOR THE ADDITION OF A CATALYTIC CRACKING PLANT WHICH MORE THAN DOUBLED SHELL'S INITIAL INVESTMENT OF \$10M. BY 1959 THE REFINERY CAPACITY WAS 2,400,000 TONNES PER ANNUM.

The refinery was linked to Newport by a 36 mile, eight inch refinery products pipeline. With a superior insulating technique, the pipeline was one of the longest product pipelines without heating facilities in the world.

It was a time of massive development in refining techniques and expansion of the market. The industry was growing in efficiency and complexity with more precision in production, as well as being cleaner and more automated than before. The vehicle engines of the day were increasing in compression and needed higher octane rating petrol. The octane rating of Shell petrol in Australia increased from 72 at the end of the war to 92 for premium and 84 for regular by the time Shell introduced the new Super grade product in 1955.

Catalytic cracking was the key technology. It replaced thermal cracking, a sledgehammer of a process that used intense heat to break up the molecules of residual oil from the distiller into lighter components. Catalytic cracking gave much greater control over the process and eliminated most of the unsaleable coke left by thermal techniques.

Geelong also added a polymerization plant, platformer unit, a 50,000 tonne capacity bitumen plant and a road and rail bulk distribution center. Liquefied petroleum gas (LPG) from the refinery went on sale in 1958 with *Shellane* for bulk industrial use and *PortaGas* for household use.

The late 1950s and early '60s saw Geelong expanded with a sulphuric acid plant, hydro-desulphuriser, detergent alkylate, hydrocarbon solvents and high viscosity index automotive-grade lubricating oil plants.

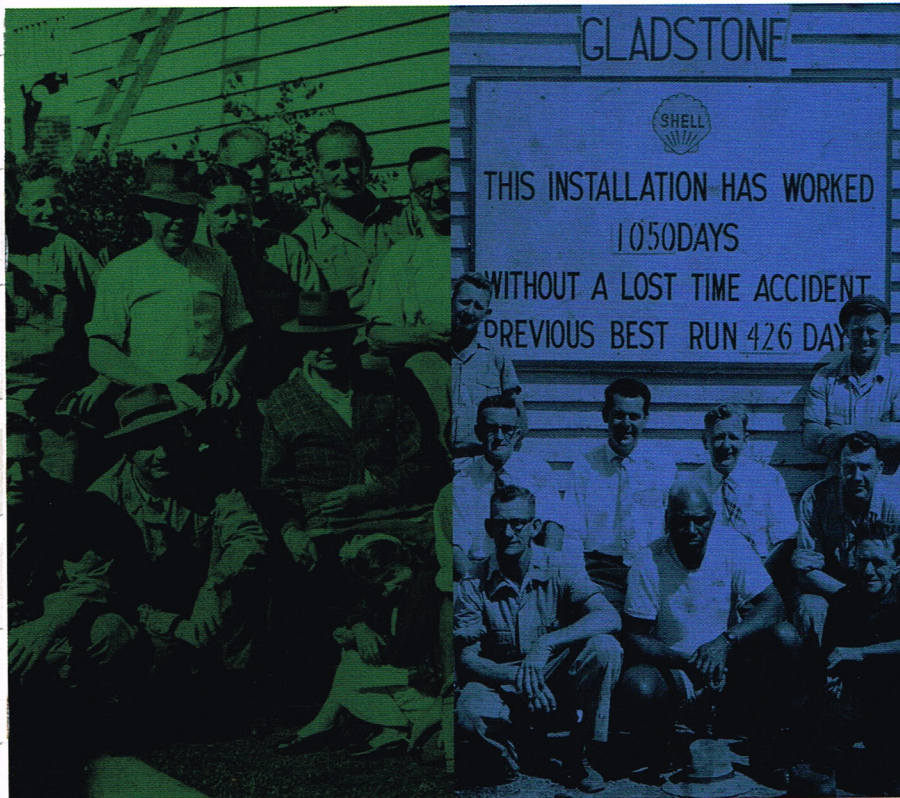
The smaller, older Clyde refinery had closed during the war except for distribution and making products such as solvents. Clyde's postwar expansion included a bitumen plant in 1948 that used a partly distilled heavy crude oil to give a heavier, more viscous product. This was then blown or had air bubbled through it in differing proportions to give the various degrees of rigidity needed (flexible for road-making, rigid for roof sealing).

By 1958, Clyde had its own platforming unit and a 220 foot high flare stack. It began supplying ethylene by pipeline across Sydney to the ICIANZ Botany plant (later ICI, now Orica). An epoxy resin

plant was added shortly afterwards and this was followed by a plant for ketone solvents.

The biggest step at Clyde was during 1960-63 with its ambitious balanced energy catalytic cracking complex. The intense heat developed in cracking the residue was used for power generation to reduce the need to buy in electricity.

The expansions at Clyde ended the colourful practice of 35 years of moving the crude oil feedstock upstream from Gore Bay by tug-drawn barges, though barging of products continued. Shell convinced wary neighbourhoods and councils that it would be safe – as it proved to be – to build a 12 inch underground crude oil pipeline in 1962. The pipeline went 17.7 kilometres through the suburbs and under two stretches of water to connect the two major points of Shell's operations in Sydney.



WHILE CELEBRATING ITS GOLDEN JUBILEE IN 1951, SHELL AGAIN REVOLUTIONISED THE INDUSTRY BY BEING THE FIRST OIL COMPANY TO HAVE ONE-BRAND SERVICE STATIONS. THESE SOON REPLACED THE OLD MULTI-BRAND OUTLETS AND THEIR LINES OF PUMPS ALONG THE COUNTRY'S KERBSIDES.

The postwar years saw a swing away from rigid unitary trucks to semi-trailers and, by the late '50s, aluminium tanks and then trailers were replacing all-steel construction. Loads and speeds were limited by different state road and heavy transport regulations. For many years oil company trucks were limited to 45 miles per hour (90 kilometres an hour).

The traditional rail haul of product from Adelaide to Alice Springs and then Darwin was replaced – at least in the Northern Territory – by road trains in 1967. Diesel, motor spirit and aviation fuels were the principal products. The first road trains were two or three trailers capable of carrying up to 20,000 gallons. They were hooked up to an Atkinson rigid truck, powered by a turbo-charged diesel engine which developed 335 brake horsepower and had a 13 speed gear box.

The following year, Shell launched its first Australian-built ship tanker at Whyalla in South

Australia. The 27,000 tonne *Cellana* was designed to carry fuel oils around the Australian coast and she was succeeded in later years by the *Nivosa* and the *Conus*.

During the 1960s, Shell adopted a disciplined approach to its service station network, rather than adding or building new ones as opportunities arose.

Low-volume sites were closed, company-owned real estate was sold and about \$120 million was spent on better sites with an American-style ranch design plus a wide canopy favoured.

Factors that were considered in picking a retail site included the volume of traffic that flows past the outlet as well as adequate frontage and access. On main highways, freeways and divided roads, there may have to be outlets on both sides and they must have excellent visibility to oncoming traffic. Two of the cardinal rules were: if competitors already have the pick spot, go

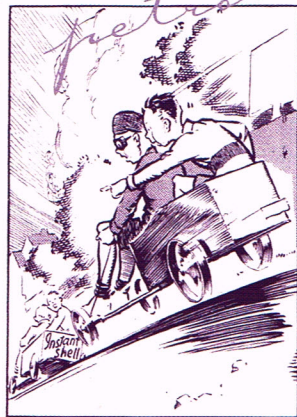
somewhere else; and avoid locations where a competitor can 'take up a better site later.

Shell led the industry into electronic self-serve pumps in 1976, again stealing a march on the competition by making a surprise strike and initially offering discounts for self-serve. This was also about the time pumps were converted from imperial gallons to metric litres.

To put this period into perspective, in 1952 Shell owned or leased 218 service station sites or five per cent. By 1972, Shell had reached 1591 (40 per cent by numbers but nearer double that by value sold). By then, less than 100 of Australia's total retail petrol outlets were multi-brand. In 1972, nearly half of Shell's sales by volume were motor spirit.

From left to right - Jack Scott stencils one gallon tins at Newport in 1963. • ICA performed a detergent and protective role in the engine. These publicity vehicles are travelling along Perth's Hay Street in 1954. • Retired staff at the 1963 Christmas function in Melbourne. • Newport employees helping out a mate by painting his house. • The importance of safety. • "Go Well, Go Shell" first became the advertising slogan in 1968. It stands above Peter Manton's Mini-Cooper at Calder Raceway in 1969.

emphasise
vers and good garage
ice station design, as
information about
industry and petrol



Mechanic: "That kid beat you off the mark easy Bill."
Driver: "Yairs! No wonder! 'is old man drives a petrol waggon!"

refining: the facts and figures

Shell has two refineries in Australia: Clyde at the junction of the Parramatta and Duck Rivers at Rosehill, 16 kilometres west of Sydney's central business district; and Geelong on Corio Bay north of the main city area near the start of the freeway that links Melbourne and Geelong.

Clyde refinery, Australia's oldest, supplies approximately 40 per cent of Sydney's petroleum requirements and about half of those of New South Wales. Geelong, commissioned in 1954, provides around 50 per cent of Victoria's fuel and also exports to New Zealand and the Pacific.

The refineries break down crude oil feedstock, removing impurities and rearranging the hydrocarbons into transport fuel and industrial products. A variety of processes are used at the refineries to separate oil into different products and convert low value products into high value products. The processes include distillation, platforming and catalytic cracking.

Distillation separates an oil mixture into its components by first boiling the mixture and then collecting different fractions as they cool back to liquid at different temperatures. Platforming, also known as reforming, increases the octane number of gasoline by removing hydrogen from molecules. Catalytic cracking cracks heavy oil fractions into fragments to produce more valuable components such as liquefied petroleum gas (LPG), gasoline and diesel.

Together, the refineries have the capacity to process about ten million tonnes of crude oil

and other feedstock and produce more than 12 million litres of petrol, diesel, aviation fuels and kerosene a day.

Montell Australia, now Basell, operates polypropylene units at both refineries, converting propylene into pellets for use in manufacturing plastics.

Clyde receives its crude oil from Gore Bay receiving and storage facility in Greenwich which is visited annually by up to 100 tankers, typically 90,000 dead weight tonne (dwt). Gore Bay also provisions ships' bunkers and is an export terminal for refined products such as fuel oil and gas oil. Refinery feedstock is pumped to Clyde via a 17 kilometre, 300 mm diameter underground pipeline.

Geelong receives its crude oil either by pipeline direct from the Gippsland oil fields or by ship from other Australian oil fields, the Middle East, Far East and Africa. The refinery jetty is nearly one kilometre long. There are two product pipelines linking the refinery to Newport terminal in Melbourne's west and another that links to Lara LPG terminal. Approximately 45 per cent of product is distributed by these pipelines, 15 per cent by rail and road and 40 per cent by ship.

1941

- Crude oil supplies cut and Clyde refinery becomes an essential wartime industry

1943

- SDA suspends exploration until after the war

1953

- West Australian Petroleum (WAPET) discovers oil of commercial quality in its Rough Range No 1 well near Exmouth Gulf but further expenditure of nearly £6 million fails to locate oil in commercial quantity

1960

- Second major expansion of Clyde refinery, total capital expenditure \$34 million
- First major expansion of Geelong refinery

1966

- 1977

- SDA explores Great Australian Bight

1968

- Lady Casey, wife of the Governor-General launches Shell's first Australian-built tanker, the 24,700 dwt Cellana
- Shell commissions Australia's first turbine oil plant at Newport terminal

1972

- 1980

- Second major expansion of Geelong refinery

1946

- Clyde refinery reopens

1947-1951

- Shell launches a £1 million four-year oil exploration and drilling programme over 50,000 square miles of Queensland
- Launch of Shell Touring Service

1948

- Shell Mobile Film Units bring cinema to many remote communities for the first time

1949

- Shell makes its 30th film and sponsors Australia's first demonstration of television

1950

- John Heyer becomes producer of Australian Shell Film Unit: his films include Rankin Springs is West, Shellubrication, The Forerunner, Two Men of Fiji, Playing with Water, Back of Beyond and the series In the Steps of the Explorer
- Shell launches its Post Graduate Scholarship Scheme.

1951

- Shell introduces the 'dealer plan' or solo marketing, hailed as the biggest single development in Australia's petroleum marketing history. The resulting network of stations selling only Shell products reduces distribution costs and contributes to keeping down the price of petrol
- Decision taken to build Geelong oil refinery at Corio

1954

- Shell Chemical (Australia) Pty Ltd forms to market the product of Australia's first petrochemical plant, Geelong refinery's sulphuric acid plant

1955

- Shell establishes Shell Aria Award

1958

- Shell takes a 28.6% interest in WAPET's oil exploration venture
- Shell Chemicals announces an epoxy resin plant at Clyde refinery

1958

- First major expansion of Clyde refinery, total capital expenditure \$18 million

1959

- Shell announces a detergent alkylate plant for Geelong and a petrochemical plant for Clyde

**1960
– 1964**

- SDA 'roving team of geologists' explore large areas of onshore Australia

1962-1971

- SDA explores onshore Maryborough, Queensland

1963

- SDA joins forces with Woodside and Burmah to explore the North West Shelf

1964

- Shell sponsors the Beatles' only Australian performance for television

**1964
– 1968**

- SDA explores Sydney Basin, New South Wales

1965

- SDA explores Otway Basin, Victoria (1965-1975), Arafura Sea (1965-1977), Bass Strait (1965-1975, 1981 onwards)

1966

- WAPET declares Barrow Island a commercial field
- Offshore drilling starts in the Otway Basin
- Third major expansion of Clyde refinery, total capital expenditure \$20 million

1970

- Shell Chemical erects the first southern hemisphere polypropylene plant at Clyde refinery, capital cost of \$16 million

**1970
– 1973**

- First wave of oil shocks
- Market for LPG increases rapidly

1971

- The first big discovery of North West Shelf gas at North Rankin

1972

- Commissioning of the Westernport Altona Geelong pipeline
- Shell octane rating of premium petrol is 98-99, regular 89-91

1972

- Discovery of Angel and Goodwin on North West Shelf

1973

- Shell Folkloric Festival begins
- Shell launches sponsorship of West Australian Shell Youth Concert

1972 – 1973

- Offshore Canning exploration

1975

- Shell Fremantle Print Prize established

1976

- Shell leads the industry in Australia into electronic self-serve pumps

**1977
– 1980**

- Offshore Canning exploration

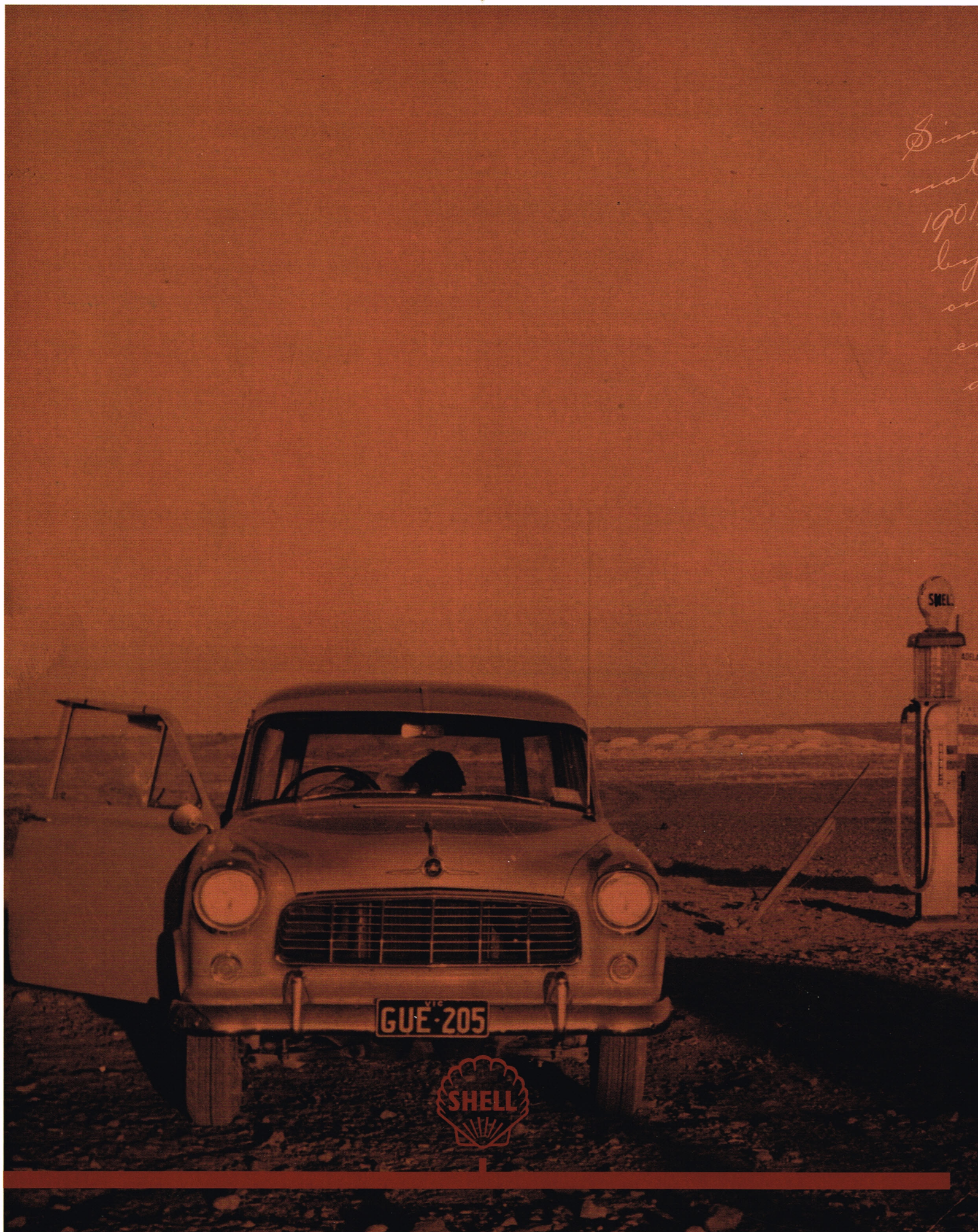
1978

- Formerly separated Shell companies in Australia brought together as Shell Australia Limited

1980

- Shell Mileage Marathon established to encourage the development of fuel economy techniques and technology

Cooper Pedy service station 1950.



*Australia became a
in its own right in
hell has marched step
step with the country
to journey of social and
cultural change, of national
development.*



land of incongruities



Australia is a land of incongruities. It is the only island that is also a continent...and the only continent that is also a country. Its original inhabitants arrived before there were modern humans in Europe or the Americas. Two centuries ago it became a prison for the unwanted of the northern hemisphere.

Today Australia is stable and peaceful. It is one of the most culturally diverse communities on earth. The majority of the population hunkers down on the coast but dreams of the inner heartland, the bush. Its towns and cities are a long way from each other, just as Australia is a long way from anywhere else.

Australia is also old. Its geological stability has preserved many of the oldest things on earth. Eight per cent of the plants and animals that live in this country are found nowhere else. Many species are still unknown to science.

Since Australia became a nation in its own right in 1901, Shell has marched step by step with the country on its journey of social and cultural change, of national development.

Shell took a broad national view and did not confine its activities to the congested metropolitan areas where business was more profitable and distribution easier. It organised a system of fuel and lubricant distribution over the whole country. It enabled enriching trade and economic development.

Where others deemed Australia too old, too undisturbed by great earth movements, too little formed upon the remains of aeons-old seas to be a source of oil and gas, Shell persisted in the belief that the hot, dry, flat land and its surrounding ocean would yield its secrets. And it has, revealing a huge storehouse of energy beneath the bright blue waters of the Indian Ocean and Timor Sea.



Exploring the wide brown land and deep blue sea

SHELL HAS BEEN EXPLORING FOR OIL AND GAS IN AUSTRALIA SINCE THE 1930s, DECADES CHARACTERISED BY COUNTLESS SETBACKS AND EVER-RENEWED OPTIMISM, BUT ABOVE ALL BY DOGGED PERSISTENCE AND COMMITMENT TO THE IDEAL OF THE COUNTRY'S SELF-SUFFICIENCY IN HYDROCARBONS.

To search for and produce oil and gas in commercial quantities means spending very large sums of capital. In the past ten years alone, Shell had spent over AUD 1279 million dollars (at 2000 equivalent value) in its search for oil and gas. The rewards amount to Shell equity reserves of 1705 MMboe (barrel of oil equivalent).

Shell was awarded its first Australian exploration concession on 27 November 1939 over an area of 135,000 square miles of southern Queensland's Great Artesian Basin. Active exploration began in 1940 and, because the Shell team was moving in essentially uncharted territory, it frequently had to carry out standard topographical work, as well as its geological and geophysical surveys thereby helping map a large part of unknown Australia.

Aerial photographs augmented the topographic and geological maps made on the ground. 250,000 square miles of country and 3,000 water and other wells were investigated before exploration came to a close in 1943 until after the War.

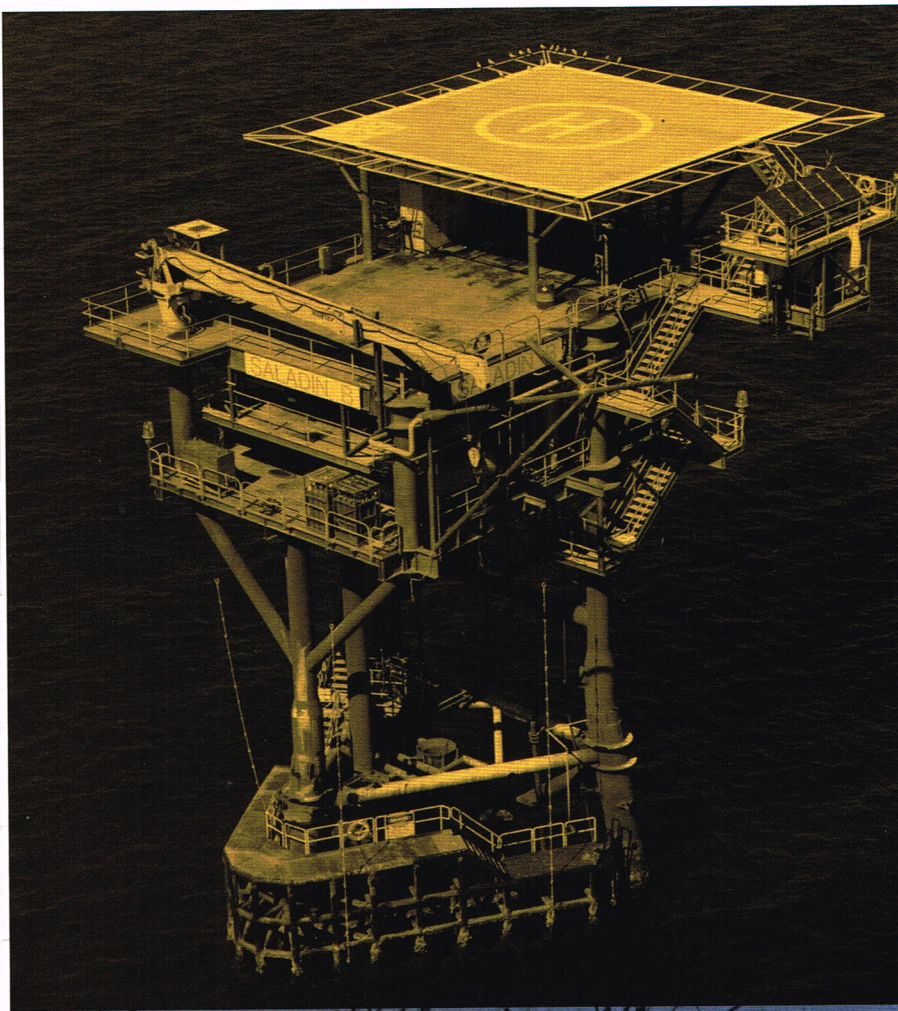
Exploration resumed in 1947 and, while hampered by postwar equipment scarcity, Shell had more than 1,500 tons of heavy gear, including a 136 foot steel derrick, engines and transmission pumps at the drilling site by 1950.

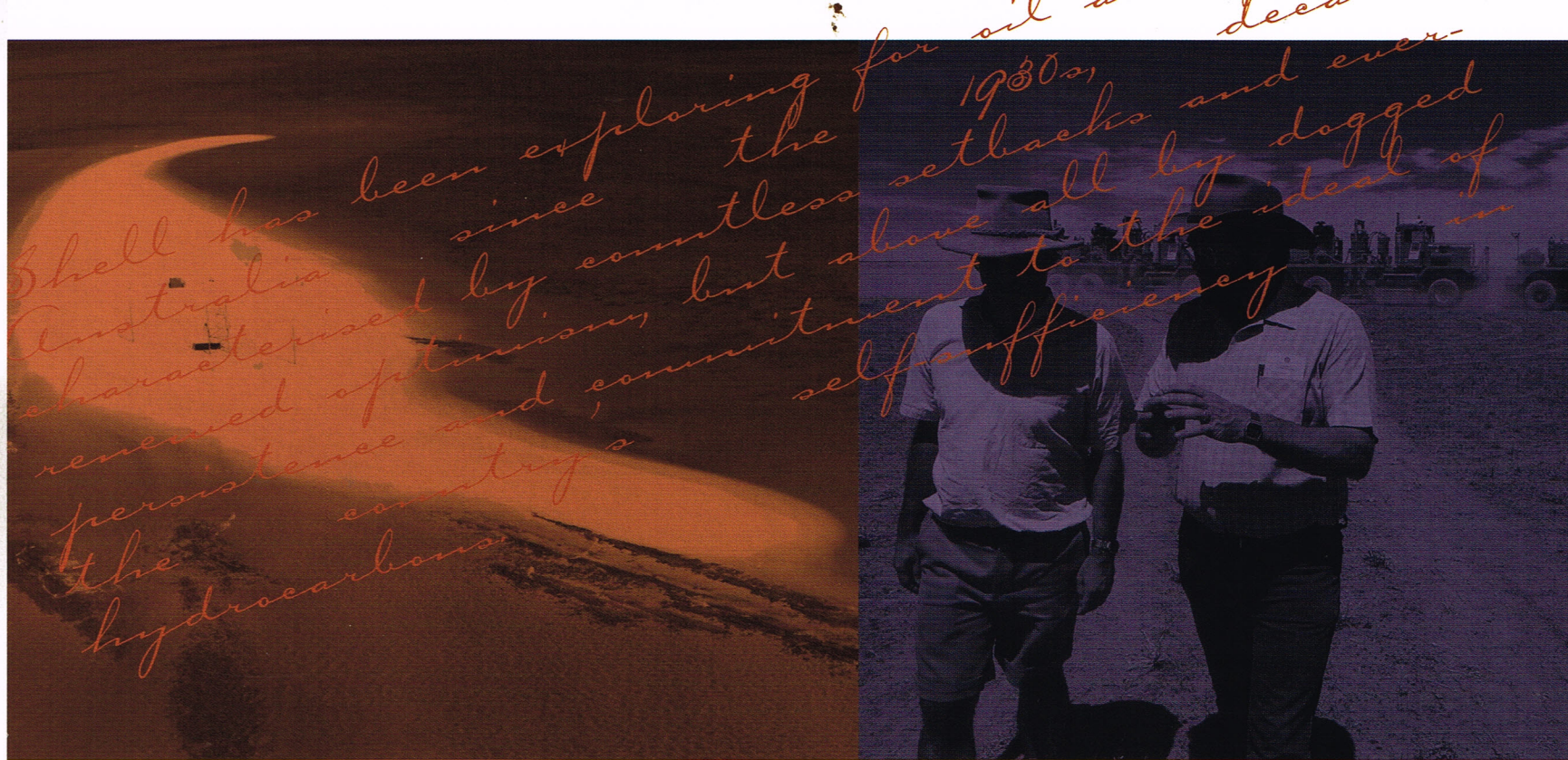
The tent city camp, with its stores, workshops, laboratories, lighting, offices, mess hall, kitchen and recreation facilities was not unlike oil field camps the world over. The differences were in geography and climate. The 60 or 70 inhabitants had been gathered from many parts of the earth:

from all Australian states, from Britain, Holland, Switzerland and Germany. Many men, including Australians, were in the Australian bush for the first time. Many were looking for oil for the first time. The great derrick was built under the direction of a Dutch toolpusher by an ex-linotype operator, an ex-typewriter salesman and an ex-cattleman.

The well was spudded in on 30 April 1950 but was abandoned as a dry hole in February 1951. This ended a 12 year effort to find oil in Queensland at a cost of £1 million – more than all prior oil exploration in Australia.

Opposite, clockwise from top left - • The Saladin (WAPET) oil field well head unit in shallow seas near Barrow Island, Western Australia. • One of the most popular titles in Shell Australia's Film Library was John Heyer's *The Back of Beyond* which went into production in 1952. On the face of it, the film is about one man's resolution and tenacity in carrying mail and supplies along the track from one remote outpost in the heart of Australia to another – from Marree in South Australia to Birdsville in Queensland – through some of the most daunting conditions a regular traveller in the age of wheeled transport could ever encounter. But the film captures an entire national ethos and its enduring values of fortitude, resilience, resourcefulness and friendliness. New generations of Australians are now being enthralled with the broad picture it paints of a way of life now vanished, the contrast it sets between geographical desolation and the power of human optimism, the uncompromising earthiness of Jack the dogger, the magical incantations of Old Joe the rainmaker, the legends of two lost children and an abandoned Lutheran mission and, above all, the unassuming determination of delivery man and 'everyman' Tom Kruse himself. • The SDA tent city at Morella in Queensland in the early 1950s.





IN 1958, SHELL JOINED THE WEST AUSTRALIAN PETROLEUM PTY LTD (WAPET) VENTURE AS A 28.6 PER CENT PARTICIPANT IN RETURN FOR FULL FUNDING OF 18 MONTHS OF ONGOING EXPLORATION. THERE WERE ENCOURAGING GAS FINDS AT YARDARINO (1964), DONGARA (1966) AND MONDARRA (1968) BUT, MORE SIGNIFICANTLY, 1964 MARKED THE DISCOVERY OF THE HISTORIC BARROW ISLAND OILFIELD.

WAPET's subsequent discoveries include gas at West Tryal Rocks (1973), Spar (1976) and Gorgon (1980) with oil at Saladin (1985), approximately 25 kilometres NNW of Onslow, near Western Australia's Thevenard Island.

Now known as CTES (ChevronTexaco, ExxonMobil and Shell) joint venture (Shell interest: 28.6 per cent), the Gorgon gas reserves are estimated to contain more than 15 trillion cubic feet (Tcf) of gas, the largest gas field ever discovered in Australia.

Shell's own offshore petroleum exploration in Australia began in 1967 with a three well programme in the Otway Basin, using the Sedco 135E, the first semi-submersible unit to operate in Australian waters.

In the early 1970s, SDA commissioned the *Petrel*, a converted Norwegian trawler built to survey the continental shelves of the world, collecting seismic data together with gravity and magnetic information.

By June 1974, Shell had gone all around Australia's outer continental shelf collecting over

26,000 kilometres of data in the course of three 'roving surveys'.

In 1981, Shell won a permit to begin exploration in Bass Strait. This led to the discovery of the Basker, Manta and Kipper fields. Later, as part of its strategic alignment in 1999, Shell sold its interests in the Bass Strait gas and oil fields to its Alliance partner Woodside.

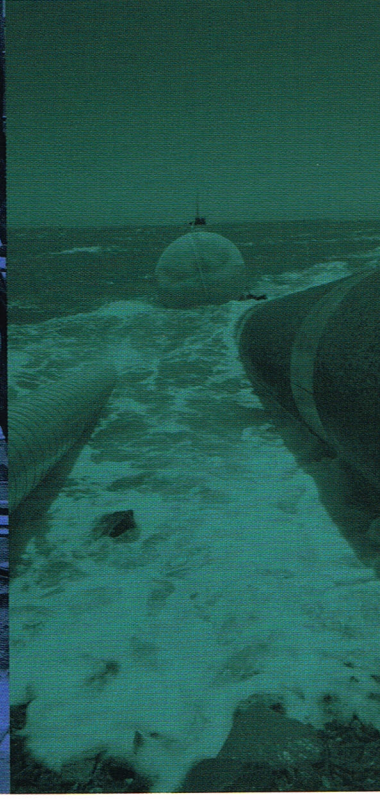
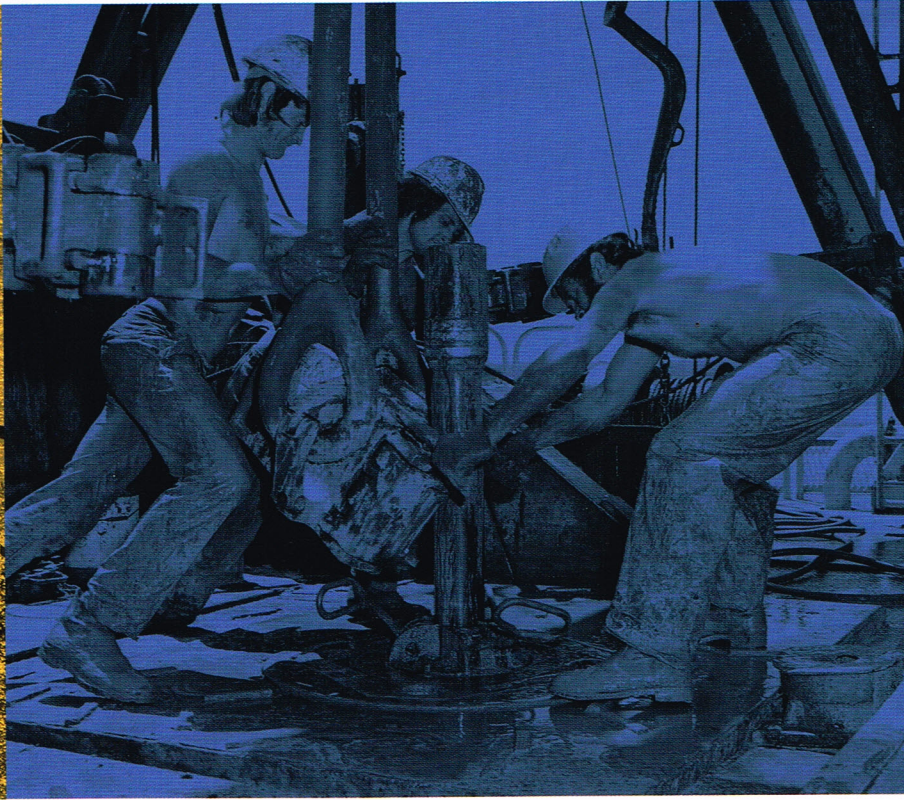
Shell's first involvement with Woodside, then a small Australian oil exploration company, was in 1963 to explore for oil and gas off the remote northwest coast of Australia.

The first big discovery of what was once labelled as 'the loneliest gas in the world' was North Rankin (1971), followed by Angel and Goodwyn in 1972.

This was the beginning of what proved to be Australia's largest engineering project and, in the late 1980s, the largest natural resource project in the world. Bringing the gas into production to supply local (1984) and overseas (1989) markets posed formidable financial and technical challenges.

Development activities spanned 20 years and cost \$12 billion. Throughout, Shell has been technical adviser to the North West Shelf project and owns 34.3 per cent of the project operator, Woodside. Export of LNG began in 1989 and the 1000th cargo of LNG was delivered to Japan in 1999.

Above, from left to right -
 • Sandy Atoll on Scott Reef, 430 kilometres from Broome, was where one of the first large gas discoveries was made in Western Australia.
 • Shell acquired more than 1,000 kilometres of seismic data in Queensland's Eromanga Basin in 1988.



THE NORTH WEST SHELF DOMESTIC GAS CONSTRUCTION PHASE EMPLOYED NEARLY 1,500 PEOPLE FROM LABOURERS TO MANY BUILDING AND METAL TRADES WORKERS TO PEOPLE WITH UNIQUE EXPERIENCE IN ASPECTS OF THE OIL AND GAS INDUSTRY. MORE THAN 2,000 PEOPLE WORKED ON THE DAMPIER TO PERTH PIPELINE WHICH CROSSED 24 RIVERS, 383 ROADS AND 13 RAILWAY LINES.

Woodside's first crude oil development is based on the Wannea and Cossack oilfields, discovered in the late 1980s. Production from the FPSO (floating production, storage and offloading) *Cossack Pioneer* began in November 1995.

The Laminaria and Corallina oil fields came on stream in November 1999. They are located in a remote area of the Timor Sea, 160 kilometres south of the island of Timor. The FPSO *Northern Endeavour* is moored permanently between the two fields and is designed to allow an offtake tanker to be moored in tandem for crude oil transfer.

Exploration in the Bonaparte Basin in the Timor Sea some 25 years ago led to the discovery of the Evans Shoal, Sunrise and Troubadour gas fields. Together they comprise the Greater Sunrise fields with gas reserves of nine Tcf. Shell and Woodside, 50:50 participants in the Northern Australian Gas Venture (NAGV), have commissioned Australia's largest single 3D seismic program on the Sunrise gas fields and

have assembled the world's foremost engineering expertise.

Detailed appraisal of the gas fields is underway and plans are being made to develop the world's most advanced and efficient production facilities. Initial development of the Sunrise Gas Project is estimated to cost \$4.7 billion of capital expenditure on gas production facilities and offshore pipelines.

In 2000, NAGV signed a Letter of Intent with Methanex Corporation, a global leader in the methanol industry and a key part of the Sunrise project as it will develop the methanol/syngas plant proposed for the Gunn Point Peninsula some 40 kilometres from Darwin.

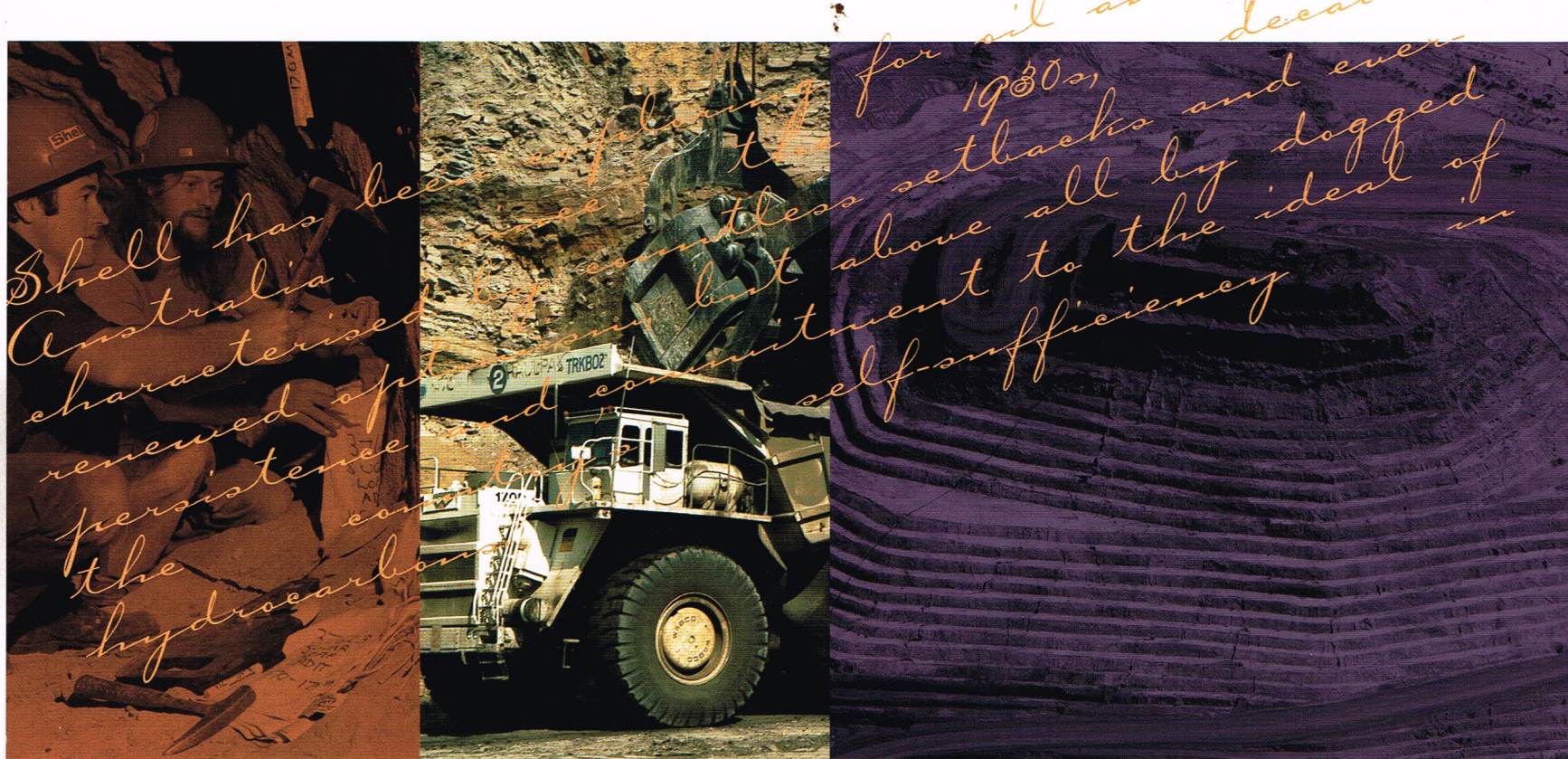
In February 2001, Shell, Woodside and Phillips signed a pre-cooperation agreement which will see the joint development of the Timor Sea natural gas assets. The agreed principles cover supply of gas and marketing LNG, pipeline infrastructure and field optimisation.

Shell's direct interest in the Woodside Petroleum-operated NWS joint venture is 16.7

per cent, except for the domestic gas phase where it is 8.3 per cent. Shell also owns 34.3 per cent of Woodside resulting in a direct and indirect share of 25.5 per cent in the domestic gas phase and 22.4 per cent in the export phase of the NWS Gas Project.

The NWS joint venture also explores for oil and gas, produces oil from Cossack/Wannea fields off the West Australian coast, and produces condensate and LNG for export.

- Above, from left to right -
- A drilling rig on the North West Shelf.
 - Roughnecks at work on the Yowalga-3 well in the Officer Basin, in Western Australia, in 1980.
 - The pipeline that connects North Rankin production platform with the processing plant on the Burrup Peninsula.



THE OIL SHOCKS OF THE 1970s LED SHELL INTO MASSIVE DIVERSIFICATION MAKING IT ONE OF THE LARGEST NATURAL RESOURCE COMPANIES IN AUSTRALIA. SHELL AUSTRALIA BECAME ONE OF THE WORLD'S LEADING EXPORTERS OF ALUMINA, GOLD AND COAL. THIS MOVE TOOK SHELL DEEPER INTO ITS ESTABLISHED WORLD OF SOFT ROCK AND INTO THE UNFAMILIAR WORLD OF HARD ROCK — INTO GREAT OPEN CUTS OR DEEP PITS CARVING INTO THE EARTH TO RECOVER BAUXITE, COPPER, NICKEL AND GOLD.

It was an exhilarating time for all concerned in a very visible world of open cuts, huge conveyor belts, long trains of laden rail wagons and giant port loaders. Shell staff moved out of their comfort zone gaining new skills, new colleagues and a hands-on understanding of managing the environment.

The move into metals began in 1971 with exploration activities centred on lead/zinc, tin, copper and nickel. In Western Australia the search was for copper, zinc, lead and nickel in the south west, as well as the Kimberley region. It was zinc, lead and tin exploration around Cobar, Orange and Ardlethan in New South Wales and Queensland's Mount Romeo and Kangaroo Hills districts.

Tennant Creek in the Northern Territory was the location of exploration for copper, bismuth and gold and McArthur River seemed a source of lead/zinc. Shell also explored for zinc and lead in South Australia and tin in Tasmania.

The earliest diversification was in a 50:50 joint venture with WMC (then Western Mining Corporation) in the Windarra nickel mine near Laverton and the nearby Lancefield gold mine in Western Australia.

In the late 1970s, Shell bought part of a Darling Ranges bauxite deposit known as Worsley. The first ground on the mine was turned in 1980 and the low cash cost alumina producer was operational in 1984.

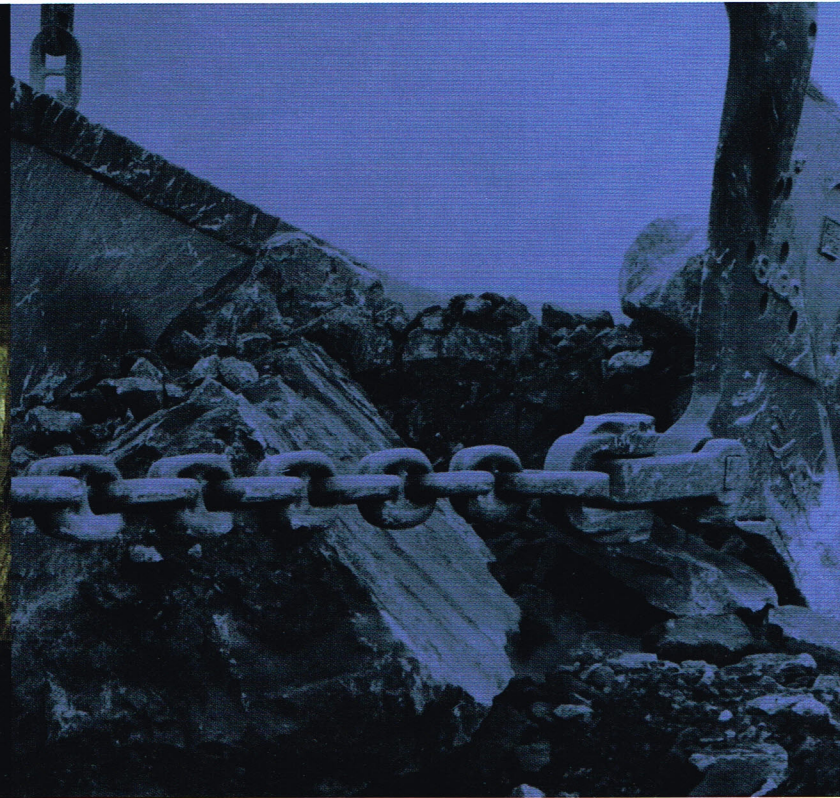
This joint venture had a lucrative kick in it — gold — and the Boddington gold mine and its facilities opened in 1987. Boddington became one of the world's lowest cost gold mines. It adopted proven technology and shared the Worsley Alumina refinery overhead facilities. In 1989–1990 it was the largest producing gold mine in Australia.

The biggest Shell venture in Australian base metals was the Cadjebut lead-zinc field on the Lennard Shelf in the Kimberley, not far from the

Argyle diamond field. Production from this low cost producer of high quality concentrates began in 1988.

After nearly two decades of heavy investment and determined effort, Shell withdrew worldwide from the fiercely competitive and often oversupplied world of hard rock metals in the mid-1990s. In Australia, Shell successfully floated its gold interests as Acacia Resources. This was oversubscribed when launched on the Australian Stock Exchange.

- Above from left -
- Metals geologists near Orange in New South Wales.
 - Exposing coal seams in an open cut mine.
 - Boddington gold mine.



SHELL'S FIRST COAL PARTNER WAS THIESS BROTHERS IN A 1977 AGREEMENT TO EXPLORE AND DEVELOP THE DRAYTON OPEN-CUT COAL PROSPECT IN THE UPPER HUNTER VALLEY OF NEW SOUTH WALES. LATER THAT YEAR IT BOUGHT AN INTEREST IN COAL MINES IN QUEENSLAND'S BOWEN BASIN, FOLLOWED BY A Foothold IN THE LONG-ESTABLISHED COAL FIELDS NEAR WOLLONGONG AND LITHGOW THROUGH AUSTEN & BUTTA. THIS ALSO GAVE SHELL A POTENTIAL ENTRY INTO THE LARGE GERMAN CREEK COKING COAL PROSPECT.

Australia was the world's largest coal exporter and coal was the nation's largest export item, earning two to three times as much as commodities such as iron ore, wool and wheat.

By the 1990s, Shell was the third largest coal producer in the country. Shell-operated mines produced approximately 15–16 million tonnes of coal a year in the mid-1990s and the development of new mines at Dartbrook (NSW) and Moranbah North, Theodore and Acland in Queensland was being planned.

In July 1997 during a year of international oversupply, Brisbane became the base for the Royal Dutch/Shell Group's international coal business.

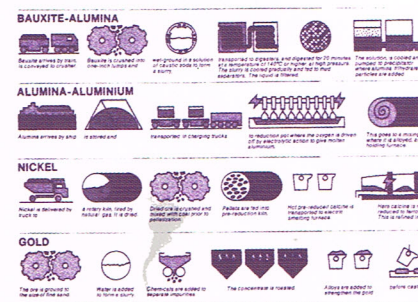
Shell Coal became a stand-alone entity entirely responsible for its own future – people, investment decisions, funding, strategy and direction. The transition included the transfer of Australian coal assets to the new organisation on 1 January 1998. Following an extensive review of

Group strategy, Shell Coal was sold to Anglo American in 1999.

Shell believes it made a special contribution to safety in the resources industry. Over the years, operational safety became a Shell passion, developed first as a zealous cause in the refineries but also in oilfield production, sea terminals and other distribution points.

Shell's principle is that all workplace accidents are preventable. The cause was drummed up at every opportunity with management commitment and follow-up, educational campaigns, safety targets and other measures.

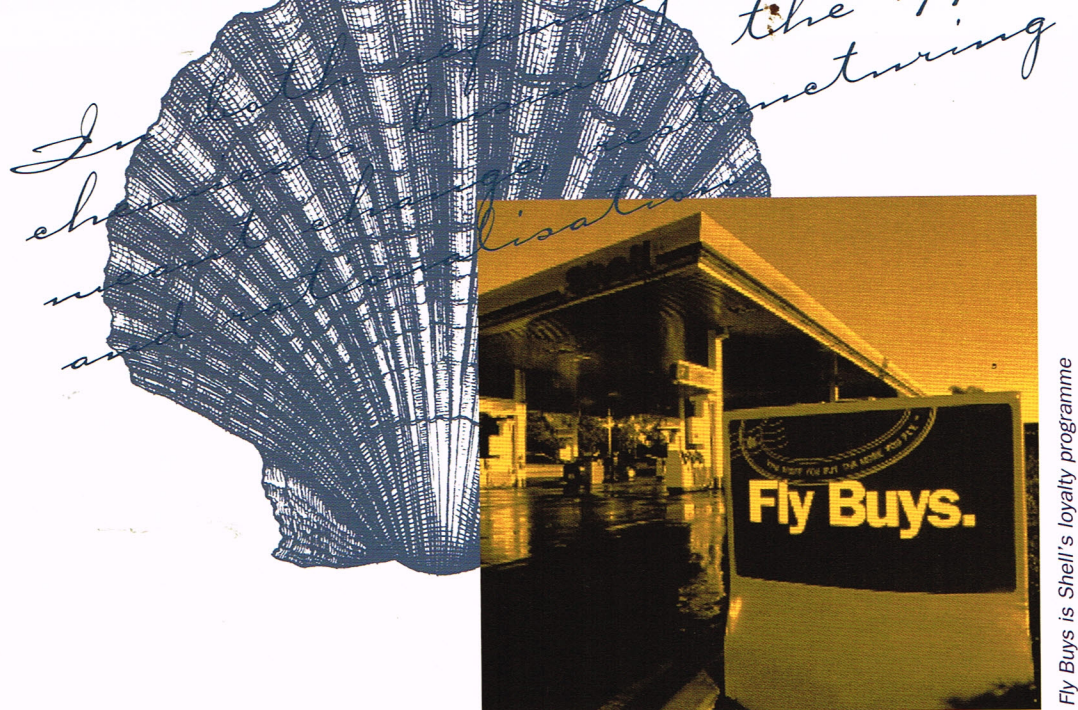
Some very impressive records of injury-free spells and several coal industry awards for safety management resulted, especially in the 1990s when Shell operational management began to bite.



- Clockwise from above from left -
- Underground mining.
 - Removing overburden at Drayton in the NSW Hunter Valley.
 - Types of metals processing.

Drilling for oil in Bass Strait 1982.





Fly Buys is Shell's loyalty programme

Coming of age

THE 1980s AND '90s SAW MANY DRAMATIC ADVANCES FOR SHELL: THE REVOLUTION IN TECHNOLOGY MEANT BUSINESS COULD BE MORE EFFICIENT — DOING JOBS AT LESS COST — AND MORE EFFECTIVE BY PRODUCING A BETTER PRODUCT OR SERVICE FOR THE CUSTOMER.

1981 saw the biggest marketing move since the introduction of self-serve: Shellcard and Fleetcard were launched as was a new automotive service called AutoCare, based initially on a franchise extended to 200 specially selected Shell service stations. Shell introduced unleaded petrol (Shell Ultra) in 1985 and high octane unleaded petrol (Shell Ultra Hi) in 1986.

Tuckers restaurants arrived in 1985 and Shell owned half of the 7-Eleven convenience store chain. By 1988, Shell had moved to Circle K which was rebranded as Shell Select in 1993. Three years later Shell began integrating some Hungry Jack's fast food outlets into Shell Select and super sites.

The local one station dealer of old was fast giving way not only to large-scale franchises operating 15 to 50 or more outlets, but also to huge stations on premium sites on busy highways and urban thoroughfares — such as a 32-pump service station at Lane Cove in Sydney.

Multi-site franchising (MSF) was another of the steps, major and minor, that heralded new ways

of working and doing business that cascaded through Shell over twenty years.

The '90s were characterised by developing loyalty programmes such as Fly Buys, in conjunction with Coles Myer and the National Australia Bank in 1995. Half lead petrol was introduced in 1994, followed by Shell Mastercard in 1998 and lead-free petrol and Optimax the following year.

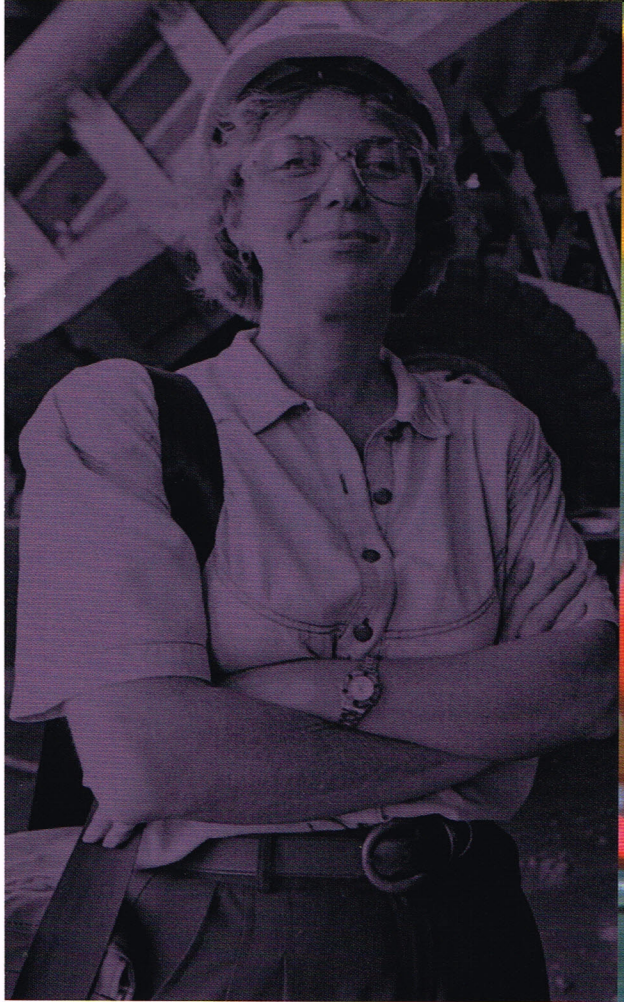
Refinery and terminal processes became less labour intensive in the 1980s and '90s; PCs appeared on desks that were renamed work stations; voicemail arrived; gantries, lubricants and grease blending and packing plants were automated; refinery control rooms centralised; and systems ranging from terminal order processing and distributor supply to comprehensive marketing and trading systems were implemented.

In 1991, Shell sponsored THOMAS, a new concept in road tanker design. Standing for Tanker Having Optimum Mass and Stability, THOMAS was a world-leading design for bulk liquid tankers,

offering major improvements in stability to minimise roll-over and fuel consumption, while maximising load carrying capacity.

In both refining and the chemicals business, the 1990s meant change, restructuring and rationalisation: most of Shell Chemicals in Australia was sold; agricultural chemicals was sold in 1993; two years later plastics became Montell Polyolefins, now Basell; lubricating blending and grease manufacturing facilities were overhauled; outsourcing and co-terminalling were major business trends.

In 1998, Shell Australia ceased to be a truck owner and outsourced its cartage to contractors already in the freight business. Shell closed the storage at historic Birkenhead terminal in Adelaide, drawing instead from the nearby Mobil terminal. In Newcastle, Mobil took product from Shell and similar arrangements followed with Caltex at North Fremantle and BP at Parramatta.



THE COMPUTER BECAME AN INVALUABLE AID FOR EXPLORATION AND PRODUCTION. ITS USE IN COMPILING THREE-DIMENSIONAL SEISMIC SURVEY RESULTS ENABLED MUCH MORE ACCURATE ASSESSMENT OF UNDERGROUND ROCK STRUCTURES. COMPUTERS ALSO HELPED THE DEVELOPMENT OF HORIZONTAL DRILLING AND GAVE ENGINEERS INCREASINGLY FINE CONTROL OVER COSTS IN CONSTRUCTION PROJECTS.

In the year 2000, fed by reserves in the Carnarvon Basin and based on Shell's LNG technology, the North West Shelf's Burrup Peninsula plant produces 7.5 million tonnes of LNG, 430 tetrajoules per day of domestic gas and associated LNG that is shipped to Japan in eight specially-designed LNG carriers.

Shell and its joint venture partners signed the first of several Letters of Intent for the sale and purchase of one million tonnes of LNG from 2004. The supply agreements will be for 25 years and provide the foundation for the expansion of the North West Shelf production.

Today, Shell is a major company in the upstream oil and gas industry in Australia through the NWS joint venture, the CTES joint venture, NAGV and other exploration. Australia is set to become one of the world's pre-eminent gas supply centres.

New products and services, new ways, new relationships and working with partners to achieve effective and flexible solutions is Shell's business at the turn of its second century in Australia. Shell is delivering innovative and personalised products and services, leveraging the strength of its brand, its customer base and network plus its ability to supply clean energy.

One of the first of the new products was Optimax, Shell's unique, high-density, unleaded, 98 octane petrol, launched in 1999 in Victoria to improve economy and smoother, quicker delivery of power, as well as a clean engine.

In its 99th year in Australia, Shell provided fuel and lubricants for the Sydney 2000 Olympic Games, launched both the Optibuy internet portal (to revolutionise business in rural and regional Australia) and the Shell Touch network (to deliver high quality, high value products and services through cashless transactions 24 hours a day in a secure environment.)

One of the most exciting developments was the energy retail company launched to capitalise on deregulation of the national Australian electricity and gas markets. Pulse Energy, a partnership of United Energy, Energy Partnership, Woodside Energy and

Shell Australia, is already servicing more than one million Victorian customers. It is Australia's first large-scale combination of electricity and gas services.

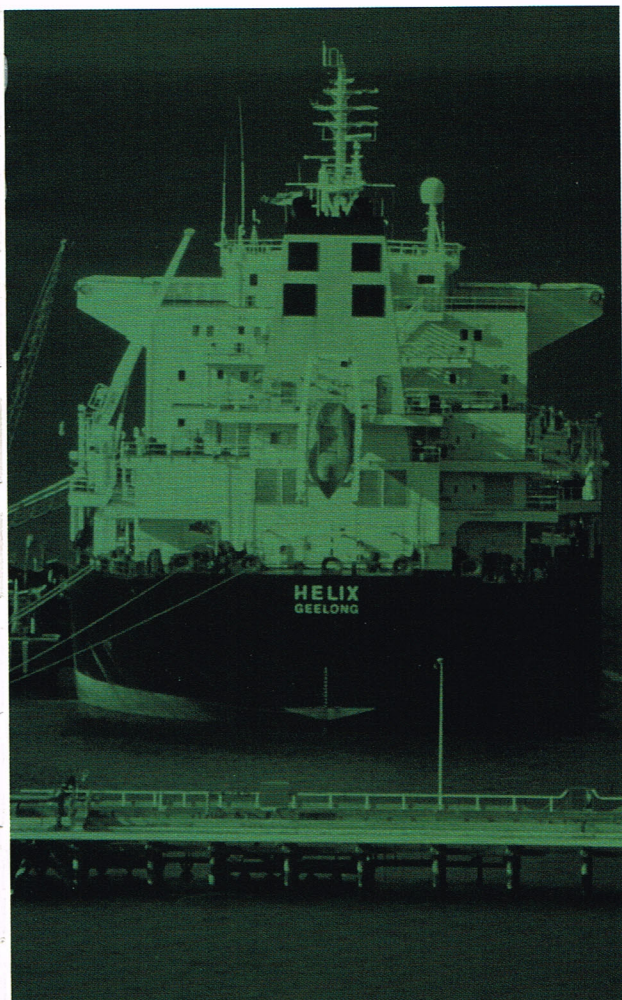
Globally, Shell sought to make better use of its potential to link countries in regions with subsequent cost savings and service improvements. From January 1996, Shell Oceania became the coordinating company for Australia, New Zealand and the Pacific Islands.

This was followed by the establishment of SSI (Shell Services International) in 1998 to take over a wide range of services. Oil Products began to organize on a more regional basis and SDA moved from Melbourne to Perth.

And from the mid-1990s, much of Shell's planning and reporting was framed under the 'triple bottom line' of financial, environmental and social performance.

While the later years of the decade were characterised by excess supply, low import barriers and relatively fixed demand in the oil products business, the pace of change continued unabated.

In the new century it promises to continue, yet the similarities with 1901 are striking. A growing, changing business, continually seeking new opportunities and refining or moving on.



- Clockwise from top left*
- LNG production on Burrup Peninsula.
 - The '90s meant change for Oil Products.
 - Helix, Shell's purpose-built 40,000 DWT oil products carrier.
 - Optimax was launched to outstanding customer response.
 - Shell's 16 year sponsorship of Dick Johnson racing is one of its most enduring.
 - Occupational health and safety are emphasised through the businesses.

1981

- Shell launches AutoCare to offer motorists specialised repair services
- SDA wins permit to drill for oil in Bass Strait
- Shell launches Conus, 32,000 dwt

1982

- Shell's exploration expenditure, excluding the North West Shelf, is \$52.5 million
- XMO automotive lubricant launched as a best in world crankcase oil

1983

- Shell completes a five year investment of \$2,000 million on new plant and equipment, oil, gas, coal and metals ventures

1984

- Inauguration of first phase (domestic) of the North West Shelf
- Sales of gas to the State Energy Commission of Western Australia begin
- The Worsley bauxite/alumina project commissioned
- Shell launches Nivosa, 115,000 dwt crude oil and product carrier
- EFT (Electronic Funds Transfer) facilities available at Shell service stations

1986 – 1989

- Shell introduces unleaded petrol: Shell Ultra
- Third wave of oil shocks
- SDA explores onshore Drummond, Queensland 1986–1988
- SDA explores offshore Beagle, Western Australia 1986–1989

1987

- After 30 million kilometres of worldwide road tests, Shell Formula Diesel enters the market
- The Boddington gold project comes on stream
- SDA explores Browse Basin, Western Australia
- Shell launches Royal Opera House Covent Garden Scholarship

1988

- Boddington gold mine (Shell interest: 30%) becomes Australia's largest single gold producer, less than one year after its first pour of gold
- Shell buys CSR coal interests
- Shell gains a majority interest in the Callide steaming coal mine in Queensland
- Shell gains a majority interest in the Drayton steaming coal mine

- SDA explores offshore Torquay, Victoria and Eromanga Basin, Queensland
- Third major expansion of Geelong refinery
- Shell sponsors Women's Cricket fourth world cup
- Shell pioneers Operation Livewire in Western Australia
- As its contribution to the 1988 Bicentenary, Shell sponsors travelling Shell Questacon Science Circus

1994

- Shell reduces its holding in Woodside Petroleum from 40.4 per cent to 34.3 per cent
- Shell introduces half-lead petrol
- Geelong commissions new sulphur handling units

1995

- Montell acquires Shell polypropylene business
- Shell Australia floats gold assets as Acacia Resources
- Development of the original scope of the North West Shelf project completed
- Shell launches Helix range of petrol engine lubricants
- Fly Buys loyalty programme

- Shell becomes one of the first three companies to join the Greenhouse Challenge
- NRMA's Clean Air 2000 initiative to reduce air pollution in Sydney launches with Shell support

1996

- Shell Coal assets reported at \$1.081 million
- Dartbrook, NSW coal mine commissioned
- Convergence of Shell's Oil Products businesses in Australia, New Zealand, Papua New Guinea and the Pacific Islands into Shell Oceania
- Go ahead for Queensland's Moranbah North coal project
- Shell announces Aboriginal Art Fund, administered by the Museum and Art Gallery of the Northern Territory



1984**- 1988**

- SDA explores onshore Canning Basin

1985

- Shell completes a five year investment of \$450 million to upgrade its oil refining and marketing network
- Shell raises its holding in Woodside Petroleum from 21.34% to 40.04%

- Sales and purchase agreement for NWS liquefied natural gas (LNG) signed with eight Japanese electricity and gas utilities

- Shell produces documentary Same Seasons to strengthen bonds between Australia and Japan; wins film awards in Japan and USA

1989

- Official opening of Shell new Australian headquarters One Spring Street Melbourne
- Shell spends over one billion dollars in fifty years in search for oil in Australia
- North West Shelf first deliveries of LNG to Japan

1990

- Shell drills for oil in Gippsland, Browse and Eromanga Basins

1992

- Major Geelong expansion with new residue catalytic cracking unit, central refinery control building and selective hydrogenation unit

1993

- First stage of a \$48 million renewal and rationalisation of Shell's east coast lubricants blending and grease production facilities
- Shell presents Van Gogh: his sources, genius and influence

1997

- North Australian Gas Venture, a joint venture between SDA and Woodside Energy forms
- Helix, 40,000 dwt product carrier arrives in home port of Geelong
- Brisbane becomes the base for Shell's international coal business
- Shell presents Rembrandt: a genius and his impact

1998

- SDA conducts largest ever single seismic survey onshore in Australia in the Canning Basin
- Shell introduces triple bottom line reporting measuring financial, environmental and social performance
- Launch of Shell MasterCard
- Supply and trading centre established at Geelong
- Operation Livewire goes national

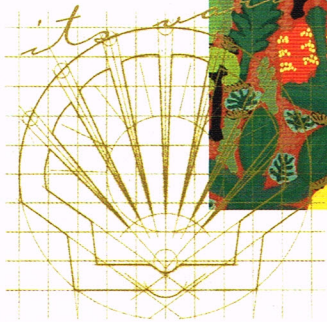
1999

- SDA moves from Melbourne to Perth
- SDA signs alliance agreement with Woodside
- Shell launches lead-free petrol and Optimax
- North West Shelf Joint Venture delivers 1,000th cargo of LNG to Japan
- Anglo American buys Shell Coal International
- Shell Foundation launched in Australia

2000

- Shell, together with others, introduces Optibuy internet portal to revolutionise rural business
- SDA enters gas and electricity retail and trading through Pulse Energy
- Shell forms EdgeCap in partnership with United Energy and others
- Launch of Shell Touch network
- Shell acquires 19.9 % interest in Sofcom, an Australian-based internet company
- Shell combines with Solar Energy Systems to trial solar water pumping systems in South Australia
- Shell provides fuel for 2000 Sydney Olympics
- Sunrise Gas Project, Australia's potential fourth major gas production hub in the Timor Sea and operated by Woodside, signs Letter of Intent with Methanex Corporation to commercialise gas resources
- Shell Australia Investments Limited makes a two-step offer to merge with Woodside Petroleum Limited

Shell worldwide commitments to sustainable development in all that it does. For its part, Shell Australia aspires to be a leader in the environmental aspects of its activities.



Just one of Shell's social partnerships - the Museum and Art Gallery of the Northern Territory's Shell Aboriginal Art Fund

Yesterday, today, tomorrow

THROUGHOUT ITS HISTORY, SHELL EMPLOYEES AND THE COMPANY ITSELF HAVE BEEN — AND WILL CONTINUE TO BE — DEEPLY INVOLVED WITH THE COMMUNITIES THEY SERVE: EDUCATION, YOUTH, SPORT, THE ARTS, RURAL COMMUNITIES, ENVIRONMENTAL PROTECTION, TECHNOLOGY AND SCIENCE — MOST OF WHAT MAKES A DYNAMIC, DIVERSE SOCIETY.

The year Australia became a nation is the year Shell arrived in Australia. As the nation has grown, Shell has been there, enabling people and provisions to travel the length and breadth of the land, crops to be grown and moved to market, resources to be uncovered and value added, people to be connected and educated.

For its first eighty or so years in Australia, Shell operated in a business model based on integration of raw materials extraction through to retail sales — near complete vertical integration — even when it diversified into coal and metals after the oil shocks of the 1970s.

This is no longer the case. The rate of technological change has had a profound impact on Shell. Business has become faster, more innovative and communication easier. Customers are equipped with better information about products and services and are able to communicate directly with suppliers, not through intermediaries. Shell is transforming itself to take advantage of advancing technologies, new markets, opportunities and customers, moving across traditional industry and national boundaries. Shell is focused on what it does best, on harnessing the competition,

improving efficiency and capturing value when it appears.

The strategic thrust of Shell's portfolio is providing better, cleaner fuels — oil, gas and power, petrochemicals and renewables. Shell is using the power of its brand name and its extensive network of retail outlets to become one of the market leaders in energy retailing in Australia. It is using its leadership in energy exploration and extraction through the use of advanced technology to sell clean energy to developing Asia. It is delivering solutions that satisfy customer expectations. It is continuing its commitment to sustainable development and contributing to building a country with outstanding education, research and development, hard technical and innovative opportunities.

To commemorate Shell's centenary in Australia, Shell Coastal Volunteers, a three year partnership with Conservation Volunteers Australia, will deliver support to remote communities seeking to manage coastal issues and provide support to community groups in urban and regional Australia.

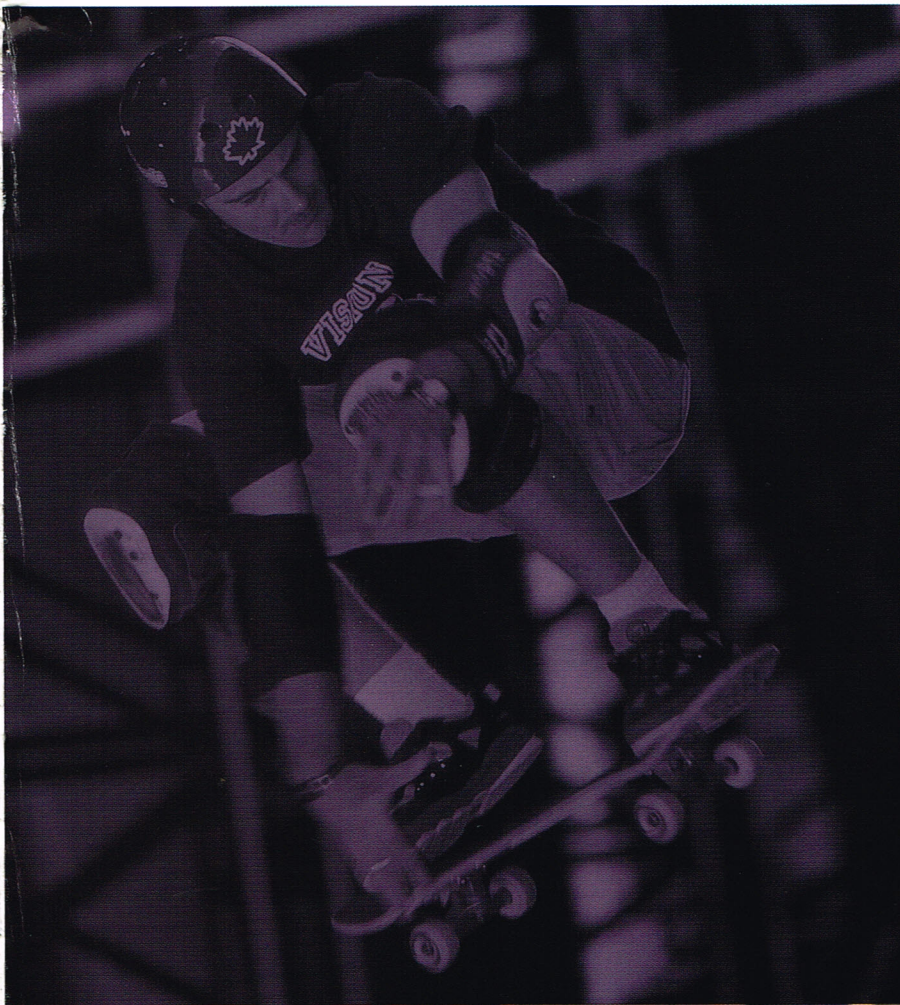
The programme will empower local communities to ensure the sustainable

management of coastal assets into the future. It will enable Shell staff, distributors, franchisees, customers and members of the community to help preserve and rehabilitate the coastline. It is a practical demonstration to Shell's stakeholders of its on-going commitment to sustainable development and community-driven initiatives.

Shell worldwide has made commitments to sustainable development in all that it does. For its part, Shell Australia aspires to be a leader in the economic, environmental and social aspects of its various business and community involvement. We are proud of our contribution to Australia and we look forward to our second century of operation with confidence.

Clockwise from top left -

- Byron McCormack, a Shell Livewire.
- Shell's support of Conservation Volunteers Australia enables students to participate in conservation projects across Australia.
- The 2000 Shell Questacon Science Circus.
- Local school students created a wetland on public waste ground alongside Newport terminal.
- Overleaf -
- The Northwest Shearwater.





Acknowledgements

Shell Australia's archives include oral history interviews, printed, photographic and illustrated material. This publication draws heavily on these archives and the following publications : • *A Thirst for Burning: the story of Australia's oil industry*, Rick Wilkinson, David Ell Press, 1983, • *Beyond the Flame: the Story of Australia's North West Shelf Natural Gas Project*, Graeme Atherton and Rick Wilkinson, Griffin Press, 1989 • *From the Edge of a Timeless Land: a History of the North West Shelf Gas Project*, Robert Murray, Allen & Unwin, 1991 • *A Century in Oil: The Shell Transport and Trading Company 1897–1997*, Stephen Howarth, Weidenfeld & Nicolson, London, 1997 • *Well, well, well...* Rick Wilkinson, Christopher Beck Books, 1997 • *Go Well... 100 years of Shell in Australia*, Robert Murray, Hargreen, Melbourne 2000.

Shell is particularly indebted to: • Robert Murray for permission to quote extensively from his commissioned history of Shell in Australia • to the Woodside Photographic Library • and to the many superb photographers – known and unknown – who have captured Shell's first one hundred years in Australia.

The etchings of shells used throughout are from the seventeenth and eighteenth centuries.



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The background of the entire page is a close-up, high-contrast photograph of a heavily rusted metal surface, likely a kero tin. The rust is a mix of deep reds, oranges, and browns, with some areas appearing smoother and others more pitted. Faint, embossed text is visible across the surface. At the top, it says "TIN MADE IN AUSTRALIA". Below that, in a larger, cursive script, it says "Shell". Further down, the words "essential" and "valuable" are visible, though partially obscured by the rust and a large, bright, circular light flare that dominates the right side of the image. The overall texture is rough and aged.

100 years of Shell in Australia

During Shell's first one hundred years in Australia, the images have moved from kero tins to LNG tankers. The key commitments of servicing customers, encouraging innovation, enabling technology and helping to build a country with better opportunities have not changed and will continue to remain an essential part of what Shell does in its second century of operations in Australia.