by RUSSELL DEILEY

ESPITE the million-dollar view weeping from Sanctuary Cove to Burleigh and the caress of the hiphugging leather squab from which he is basking in this Pacific panorama, you get the distinct impression that Noel Smith is not entirely comfortable.

He is in his going-out-and-meeting-posh-people gear - dark suit, muted tie on an almost Whirlpoolwhite shirt over black shoes - but the broken nails and grease-etched fingers suggest he'd be more at ease in shapeless overalls and up to his elbows in the engine bay of the blood-red Holden VL Commodore tethered

Perfectly normal though it looks, there is nothing ordinary about that 1986 Holden with the once-standard Nissan engine beneath the bonnet. That very same car, with Noel at the wheel and long-time soulmate Susan Carrier watching the numbers from the passenger's seat, has just completed the 1447km round

trip from Brisbane to Rockhampton and back on just 57.07 litres of unleaded petrol under stringent test conditions.

If that doesn't knock your socks off, ponder on this: in the old currency, that means the Noel Smith VL Commodore will whisk you from the Southport Post Office to Sydney's Martin Place on a drop or two less than nine gallons of petrol.

he secret to the Smith formula of miserly motoring is a little device sitting on top of the Commodore's regular powerhouse Nissan manifold which he calls the Econo Power unit. The unit is connected by a network of wiring and copper piping to a microcomputer and, through a series of pumps and purifiers to a 60-litre water tank snuggled behind the rear passenger seat.

In essence, that 60-li-tre tank of ordinary old tap water provides 75 per cent of the Smith's car's thrust. In modification terms, Smith's adaption of the basic VL Commodore has been modest about \$1000 worth of 'bits and pieces'

But in terms of inventiveness and technology, the Econo Power system has the potential to revolutionise the motor and transport industries with appropriately glittering prizes for the inventor, his original backer, Ms Carrier, and the shareholders of the Gold Coast-based miner turned confectionery, turned video-casette group turned high-tech industrialist, Red River, which secured the development option on the Smith system of harnessing water power when it took over Goldwealth Selective Technology last month.

On the strength of the preliminary Econo Power trials and some other promising high-tech hardware, shares in Red River touched \$1.85 this week, adding about \$40 million to the market value of a company which was estimated to be worth about \$200,000 in the half-yearly report last December.

But if Noel Smith was feeling any of the pangs of the nouveau riche when he opened the bonnet of his Commodore to the Bulletin this week! he wasn't showing it.

IN a fully-documented test from Brisbane to Rockhampton and return between October 19 and November 8 last year, a standard 1986 Holden VL Commodore travelled 1367km (847.54) miles and consumed 217.01 litres (47.69 gallons) of petrol. The car travelled 6.3km

litre of petrol (17.77mpg).

When the same car was fitted with Noel Smith's Econo Power device and test driven over a similar route on April 16 and 17 this year, it travelled 1447km (897.14 miles) on 57.07 litres (12.54 gallons)

On that run the modified VL Commodore achieved 25.3km per litre of petrol (71.5mpg).

He came across as nothing more than your average, eccentric inven-tor as he traced the events which have led to the de-velopment of what exhaustive unofficial and fully documented tests suggest is the world's first car to run on a three to one water-petrol mix. Sitting in our leather-bound eyrie overlooking most of the Gold Coast, it sounded simply confusing.

Smith's mind tends to travel about 85km faster than your average report-

Outside with his suit jacket pitched in the back seat, the shirt sleeves rolled up and his hands doing the talking and our eyes doing the listening, it began to make sense.

Smith, it transpires, has been tinkering with cars from the time he was old enough to hold a Sidchrome back in his native Mt Maunganui on New Zealand's Gold Coast on the Bay of Plenty. And when the scaremongers began talking about finite oil stocks in the mid-80s he began turning his, by then, university-disciplined mind to an internal combustion engine which conserves rather than squanders petrol.

The tinkering led to the development of a steam reformer in which, under severe heat, the molecules were broken down to produce energy from the hydrogen component of water. The reformer allowed that energy in the form of 500 degree Centigrade steam

TRAVELLED 1367 km CONSUMED 217.01 Litres 6.3km/Litre 17.77 mpg CONVENTIONAL MODIFIED TRAVELLED 1447 km CONSUMED **57.07 Litres** 25.3 km/Litre 71.5 mpg

to be combined with the petrol vapour to fire the engine.

After crossing the Tasman, he fitted the first, one-stage prototype to his own V8 Javelin and although much of the power generated in what was a fairly primitive device was lost, it showed sufficient conventional fuel savings to convince him he was on the right track. Ten years of refinments have produced the current, four-stage, computerised system which. with conventional fuel-injection, have achieved 75 per cent petrol savings without any discernible loss of power in the sixcylinder Nissan engine even under full economy mode.

The unit also has a computerised kick-in device which, when you floor the pedal, gives a power surge similar to the additional thrust provided by a turbo driven supercharger.

The difference, insists the inventor, is his system is a lot kinder to a car than turbo technology.

Just how kind Econo Power is to the family car and the broader family environment will now be put to the sternest tests by a mechanical-engineering team from Queensland University.

The results of those independent investigations which Red River has commissioned to discover whether the preliminary test results check out, whether the steam reformer process will shorten the normal life-expectancy of a conventional

car engine, whether it can be adapted to a diesel engine and an analytical breakdown on exhaust emissions will decide whether the project moves to the next stage of development refinement.

Smith is supremely confident it will score As in every category. He knows, for example, that his own Commodore has travelled about 250,000km with his steam reformer technology since 1991 and the engine continues to purr like a contented kitten.

He knows, too, that after surrendering its energy, the hydrogen reverts to water vapour and dissipates without adding one atom of deleterious material to the atmosphere, while the mere fact that, under full economy-cruise mode the modified engine is using 75 per cent less petrol than an unmodified engine, means that his Commodore is emitting two-third less carbon dioxide than your or my car and not a whiff of carbon monoxide

If it all sounds so simple that you wonder aloud why someone else hasn't come up with the same technological answers to fuel economy somewhere along the 100-odd year historical trail of the motor car, Noel Smith has heard the question so many times before.

"I'm sure they asked Edison the same kind of question," he says. "It just so happens that, in this case, I'm that someone," he says.



modified Commodore VL test vehicle



WATER INTO WINE, BEEN DONE. WATER INTO FUEL, I'M INTERESTED, VERY INTERESTED.



Econo Power unit, but as

IGHTEEN months ago in-ventor Noel Smith was burning up the Gaven Way to demonstrate to Bulletin photographer and resident petrol head Cavan Flynn that his 75 per cent water-powered VL Commodore had just as much grunt as your conventional, petrol-fired six-cylinder Holden.

Impressive, murmured Flynn, as he climbed out of the passenger seat.

Very intpressive, agreed traders on the Australian Stock Exchange as they pushed shares in Mr Smith's new, high-tech backer, Gold Coast-based Red River, toward the \$2 mark on the strength of a preliminary report indicating that the Holden fitted with the inventor's Econo device Power achieved 75 per cent fuel savings while emitting 75 per cent less nasty carbon monoxide on a 1447km return run from Brisbane to Rockhampton.

The flurry of shares that changed hands during a couple of hectic days trading at or near the premium price suggests that some people made a poultice on Red River shares. None of it fell into Noel Smith's

Four days after the glowing report on the fuel economy achieved during the controlled test drive and three days after Red River shares peaked at \$1.85 — a surge which added a nominal \$40 million to the market value of a company estimated to be worth \$200,000 in the directors' previous half yearly report — a fire in the engine bay of the Commodore turned both inventor and investors' dreams to ashes.

A joint Red River-Noel Smith statement on the day of the fire suggested that the blaze was a mere irritation and the Commodore and its Econo Power unit would be back on the road to prepare for independent tests within four weeks.

Eighteen months on, however, Phoenix has not risen from the ashes and the burning has left Noel Smith a very disillusioned and poorer man.

Convinced that Red River and its subsidiary Goldwealth Selective Technology have been tardy on meeting their contractual obligations under a January, 1994.

Inventor back on the road with new hope

by RUSSELL DEILEY

agreement in which he deeded the intellectual property of his invention to GST, Mr Smith has taken legal steps to sever relations with his first and, to this point, only corporate backer.

Satisfied that fire and water don't mix, he has decided to take his red Holden and, spurred by another spark of inventiveness, strike out on new energy trails, content to leave Red River to reflect on what might have been with ther Econo Power device and the legal niceties of commercial di-

In terms of cash, inspiration and perspiration, Mr Smith estimates that he and his loyal partners, Keith and Susan Carrier, have spent more than \$400,000 in the past 10 years trying to get the device up to road pace. It has got to the stage where they need a return on their investment. You can't, literally or figuratively, live on the smell of an oily rag.

"The Red River people claim they put \$60,000 into the project from the time we signed the original contract in January last year and last September 25 when we wrote to say we were terminating the agreement because they had failed to make the patent application as they were required to do under the terms, says Mr Smith.

'We haven't seen much of that money or of the insurance payout for the fire damage to my car. My records show that they gave us an initial \$4000 to develop the Econo Power unit and then another \$2000 to help rewire and fix the other damage caused by

Indeed, Mr Smith claims that by failing to

'The way things were between us and the

fulfil its obligations to apply for patent rights, GST and its Red River parent had unnecessarily opened the door for someone to steal his ideas

Through director Peter Sanders, the company counters this accusation by claiming the inventor failed to produce the final drawings to enable 'the patent application to be further processed'. Mr Smith insists not only were the drawings com-pleted, but they were attached to a previous pa-tent application.

When approached this

week, Mr Sanders insisted that Red River had performed over and above all its contractual obligations to Mr Smith.

Expressing regret that the difference between his company and Mr Smith had boiled over into the media, Mr Sanders said that the success of a product that was at the developmental stage and which was subject to a patent application depended on both the inventor and backer working together.

"The backer is the risk-taker and is entitled to normal business stan-dards," he says. "There are errors of facts in his reported statements to you. As litigation may result as a consequence to these statements, we have no further public response."

For his part, however, Mr Smith believes the time for talking is well and truly past.

'The way things were between us and the company, we were watching 10 years of concentrated work going down the tubes," he says.

Thus stalemated, he decided to cut his losses, abandon the Econo Power unit to GST and to begin work on a new device.

"I've still got the

far as I am concerned it is dead and buried. If the company claim they still have the proprietary rights to the unit they are welcome to it — along with the gauges and fuel sniffers;" he says.

As far as Mr Smith is concerned, the Econo Power phase of his inventive life is over. The void

tive life is over. The void has been filled by his enthusiasm for a new device, the Aqua-Fuel, which he is confident will produce at least 80 per cent fuel savings when attached to a conventional, internal combustion car

"The principle is the same in that they use water vaporised under very high temperatures as a primary fuel, but I have been advised by patent attorney Trevor Dredge that they are totally different inventions.

"Whereas the Econo Power unit involved forcing water vapour and fuel vapour into a steam reformer, the new device involves the input of steam and fuel vapour into a liquid converter.

'In the Aqua-Fuel unit the combined vapour is introduced from the converter into injectors from a multi-fuel rail."

Casting about for a new production partner, Mr Smith decided to turn to the old firm on whose mounts his previous units have proved so successful, General Motors Holden.

Negotiations through the local Holden Dealer Team are continuing, but Mr Smith is confident that the General will come to the party with a back-up car identical even down to the colour with his own trial horse, a red, 1986 VL Commo-

dore.
"With Holden's support I reckon we will be ready to roll on a series of test drives within two or three weeks," he says.

"We plan to begin with a fully-documented and independently as-sessed trial drive to Sydney and return, and similarly controlled tests runs to Rockhampton, to Melbourne, across the Nullabor to Perth and then back to Brisbane via Broome, Darwin and Mt

"As well as taking an independent referee on the road, we are also planning to make a documentary film of the tests. Judging by our work on the test bed in the garage, I am confident that the new device will enable us to complete those trial runs using only about 20 per cent of the fuel it would take in a conventional car.'

Once he has his new age steam car up and running, Noel Smith plans to begin developing an electric car.

But that's another sto-



□ Noel Smith and firm friend and believer Susan Carrier ponder the prospects of



GOLD COAST BULLETIN, Friday, November 3, 1995 — Page 9 ู้เรียงกับเขากลงอยกลับของกรี พระกรี พระวันเรียงให้ โดยเกราะ การก

company, we were watching 10 years of concentrated work going down the tubes'

Inventor sees Red as trials of fuel saver run out of steam

By NICK TABAKOFF

IT WAS billed as a revolution in fuel saving – a gadget that would ultimately see average punters refuelling their cars with the common garden hose.

Eighteen months ago, listed Gold Coast time-share, confectionary and video-cassette group Red River Ltd unleashed a new weapon in its armoury: Econo Power, a dazzling new fuel-saving device that used, of all commodities, water.

With its release of Econo Power, Red River joined a long list of Australian listed companies, such as Orbital Engine Company, Beltech and Collins Motor Corporation, in promising innovative engine developments.

The reported early results of the company's tests on the device were nothing less than startling.

In releases to the Australian Stock Exchange in the middle of last year, Red River claimed that tests it had conducted over a distance of 1,400 kilometres revealed that petrol consumption on cars using the system was reduced by 75 per cent.

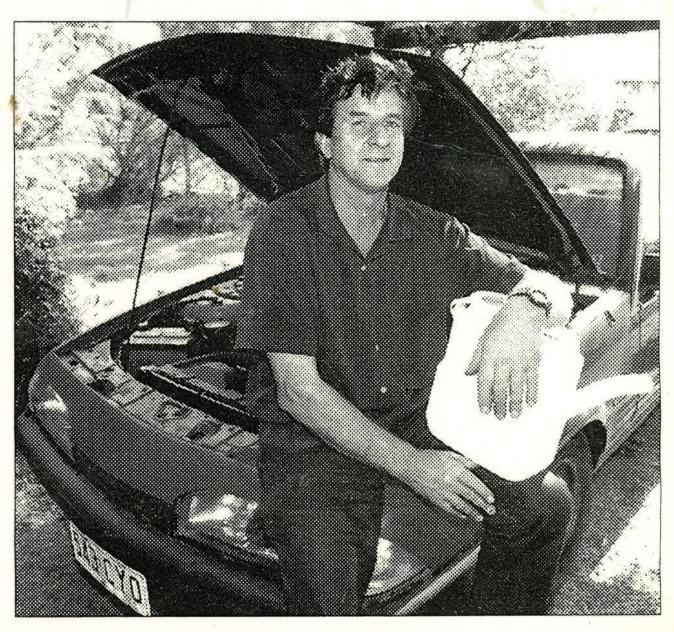
The news helped to prompt a storm of buying in Red River – whose shares traded as low as 9¢ early last year in the lead-up to the announcements.

It was an entirely different picture towards the middle of last year, with the shares hitting \$1.85 at one stage amid a frenzy of buying — related substantially to the news of the bullish test results.

But the fairytale has now transformed into a bitter battle between the inventor of the device, Mr Noel Smith, and the multi-talented Gold Coast group, as the company's share price had plunged back to 16¢ by the close of trade on Friday.

The problems, it seems, began one Black Friday in May last year when the car testing the fuel-saving device caught fire.

While announcements to the ASX at the time suggested the device was only "slightly singed",



UPSET: Mr Smith is critical of Red River Picture: ROBERT ROUGH

little subsequent testing has been conducted — amid attempts to repair the car carrying it.

However, the company made clear at the time that the fire had nothing to do with the operation of Econo Power.

But in the year and a half since the fire, there has been an absence of testing on the device – and Mr Smith says he now wants to take it elsewhere.

"I want nothing more to do with Red River," he said last week. "Everyone in Australia thinks [the device] is a load of rubbish now. The car's been sitting around for 18 months—with no more testing—because it's been burnt out."

Mr Smith said he had predicted the car would be up and running within four weeks after the fire – but after 18 months of inaction, he was looking foolish for making this prediction.

"I've been looked at as a total idiot by my friends, my relatives

and my peers [since the fire]," he said.

He also claimed that Red River had allowed the patent for the device to run out in July – a charge strongly rejected by the company.

A director and secretary of the company, Mr Peter Sanders, said last week that "Red River has performed over and above all contractual obligations made with Mr Smith".

"The success of a product in the development stage that is subject to a patent application with an inventor and a backer depends on both parties working together," he said.

"The backer is the risk-taker, and is entitled to normal business standards [from the inventor]," he said.

He added that Red River was examining its legal rights in relation to contracts between the two parties.

Day -

IT seems like a pipe dream — a car that runs on water with just a few litres of fuel to get it started.

The savings to consumers and to the environment would be enormous.

Carina inventor Noel Smith and longterm backer Susan Carrier believe they have the know-how to make it work and with soaring petrol prices and growing pollution problems, the timing is perfect for its entry to the market.

Mr Smith first produced a water-powered car 10 years ago which he and Ms Carrier drove in a documented test from Brisbane to Rockhampton.

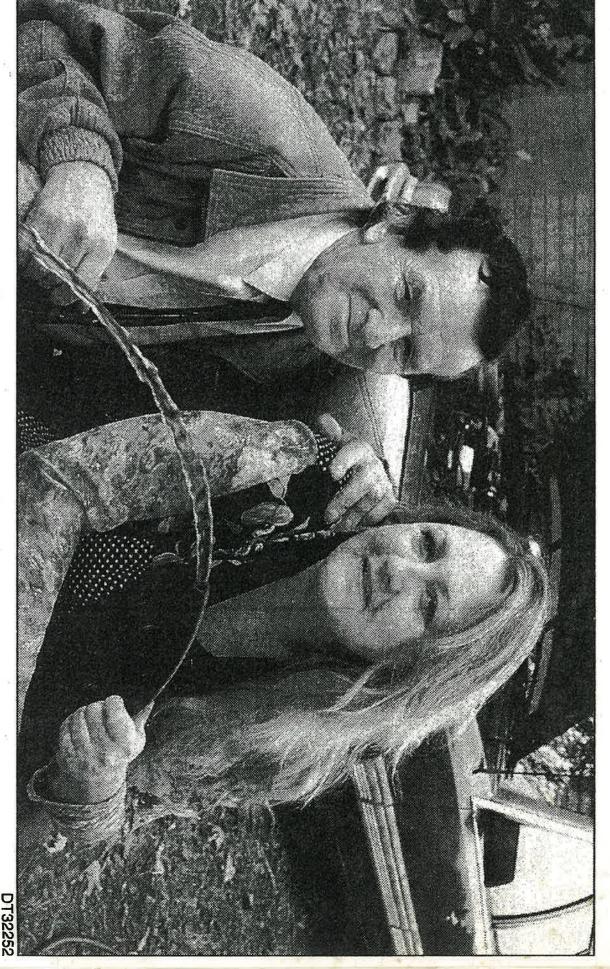
Using a 1986 Holden VL Commodore fitted with what was then called an Econo Power device, the car was test driven 1447km on 57.07 litres of petrol, achieving 25.3km per litre of petrol.

Mr Smith said the car met with some interesting public responses.

"We stopped at a petrol station at Gympie. The owner wanted to know why I only put in \$2.50 in fuel and filled the tank up with water," he said.

Unfortunately, Mr Smith's initial project failed when financial deals went sour and the prototype mysteriously burnt, leaving him a disillusioned and poorer man.

But an older and wiser Mr Smith has resurrected and improved his product and is hoping for a sponsor to help it become a reality.



Drive time . . . Noel Smith and Susan Carrier promote water power for cars.

His new Aquafuel unit, which modifies the engine, consists of a network of wiring connected to a computer motherboard linked through a series of pumps and purifiers to a 54-litre water tank behind the rear passenger seat.

"It turns the water into steam at 513 degrees Celsius," he said.

The system uses 25 per cent fuel and 75 per cent water. The fuel starts the engine and heats the water, then after two minutes the computerised mechanism switches to water power.

Mr Smith is seeking backers for his project. Phone 3843 0469.

Margaret Slocombe