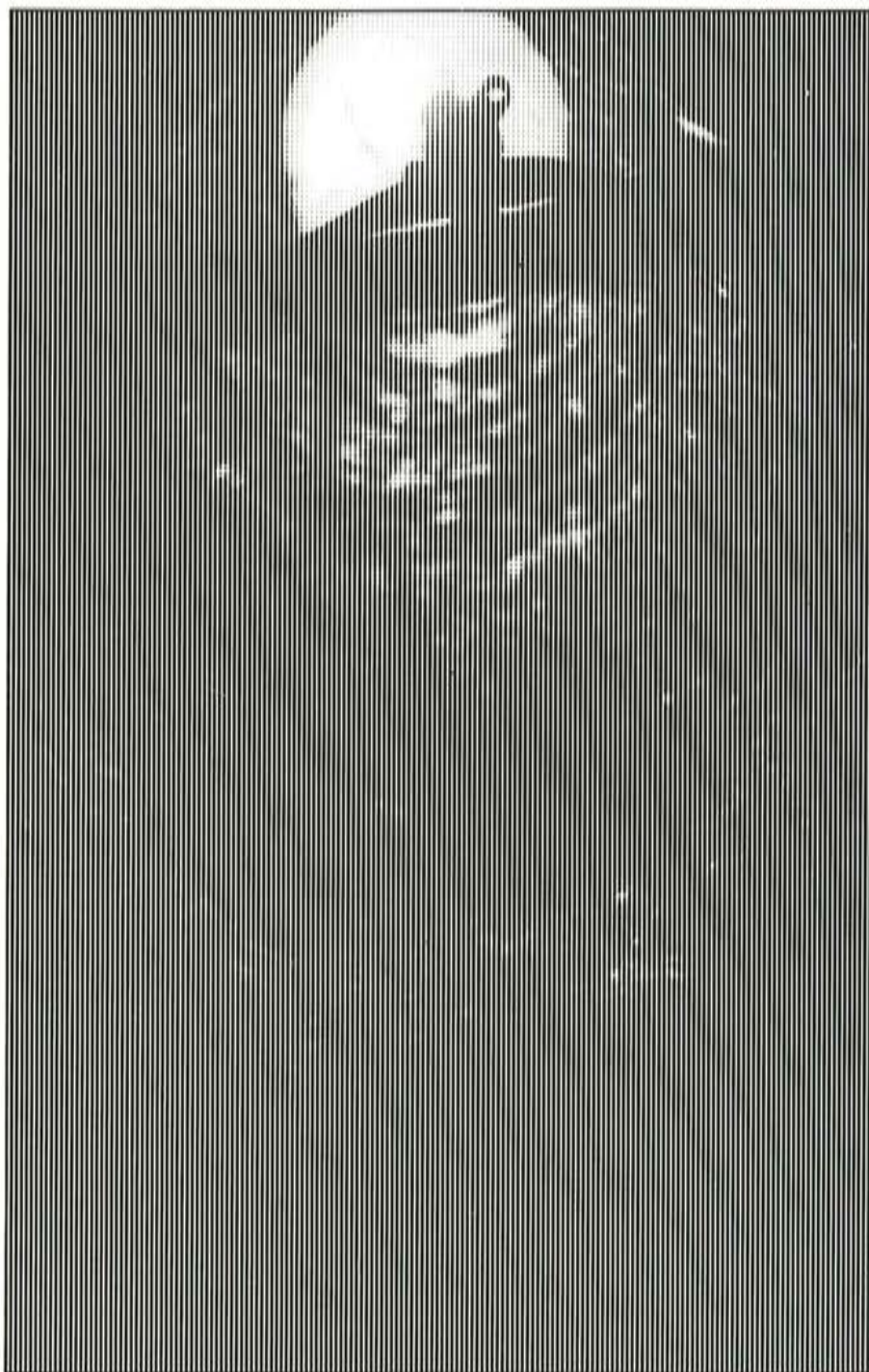


New Zealand **THE DRILLER**



**Official Publication of
The New Zealand Drillers Federation Inc**

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New Zealand **THE DRILLER** December 1984

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Federation council lines up



Members of the 1984/85 Drillers Federation council are from left, Vice-President Ces Woodford, Dick Baylis, Martyn Brown, Jim Faulkner, Murray Carlyle and Gordon Brown. Seated: President Bill Washington. Absent: Bain Webster.

Tender papers: treat with caution

DON'T get burnt, was the message that came through clearly during the general business session of the council meeting.

Councillors were concerned that many drillers were striking problems with contract documents which asked for the "impossible".

Their advice to all drillers is tag tender documents with the proviso that all requirements be subject to prevailing conditions.

An example was given of a request to "allow to achieve a watertight seal". If a driller agrees to undertake such a contract, then come hell or high water, he is bound to do that.

If, for example, the rock is fissured, the driller still has to fulfil his part of the bargain and make the seal watertight.

Failure to tag your contracts can be costly.

□ Another great gaping crevasse which awaits an unsuspecting driller concerns verbal agreements on site.

Never, never, say NZDF councillors, carry out on-site instructions from engineers or clients without getting it in writing.

Verbal agreements only leave the driller with no legal recourse in the event of disputes.

Membership grows

NOVEMBER'S council meeting approved the following membership applications:

Webster Drilling & Exploration, Wellington.

Radial Drilling (NZ) Ltd, Waihi.

B Bunk, Canterbury Drilling, Christchurch.

New members approved at the conference council meeting were:

Simpson Bros, Blenheim.

Macraes Drilling Co Ltd, Cromwell.

Westforke Enterprises, Renwick.

George Moss Pty Ltd, Western Australia.

Spiral Welded Pipes, Auckland.

Resignations were received from Fords Welldrilling, Leeston and Burgess Drilling, Dargaville (see letter this issue).

Murray Carlyle and Bain Webster were welcomed as new council members.

Large rig threat

THE THREAT to the local industry posed by drillers coming to New Zealand to carry out investigation work was discussed at the council meeting.

Councillors were concerned that once overseas firms had gone to the trouble of importing large rigs into New Zealand, they might stay on and compete

with local drillers for waterwell and other work.

"This would reflect back down to the smallest driller," one councillor said.

The council intends to seek discussion with the Government about possible forms of protection.

A farewell

After 18 months of editing The Driller, I have moved on — to the world of daily newspapers. I've enjoyed learning about the industry and meeting the people involved. A special thank you to those who steered me in the right directions and taught me that diamond drilling is only remotely connected with the Kimberley mines.

Cover: One of my final treats as Editor was a journey to the bottom of a 12m piling hole courtesy of Richardsons Drilling in Wellington — this is the view from down there. Since then, I've been told you can see the stars from the bottom of deep holes — whether it's true or whether it's just something drillers dreamed up to convince themselves it's all worthwhile, I'm not sure.

Stars or no stars, the industry appears in good shape. All my best wishes for the future.

Alison Murray

Training course intake doubles

The Drillers Federation training course being run by the Technical Correspondence Institute plans to take on 40 new students next year.

The inaugural course which began in March this year with 20 students is progressing well, it was reported to the Federation council.

Selection of the 40 students for the 1985 intake will begin shortly.

□ Plans to introduce a grandfather rights which will equate to the certificate awarded on completion of the three year training course are also underway.

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Muddy boot image long gone

SINCE the formation of the New Zealand Drillers Federation 10 years ago, the industry as a whole has made tremendous progress. Long gone now is the Muddy Boot Image. We are now looked upon as a professional group of contractors.

However, the future does worry me. For all of us, the last few years, with rising inflation and devaluation, have been the toughest we have known.

I enjoy being in this industry and meeting the people who have worked so hard to build their businesses. I believe that as professionals we should be earning a better than average income and should not settle for anything less.

To this end, I think we should all take time out and look closely at our costings. We are so different from all other contractors. What other industry is asked to give a firm quote to do a job when, if like drilling contractors they don't really know what conditions they are going to strike?

When did you last sit down and take a note of setting up costs, and daily mileages that you clock up on drilling

a well? Add these up and charge them at the same rate that your local transport charges for equivalent vehicles.

To this, add the daily wages for your staff, travelling to and from the job.

Then, add a proportion of overheads for your office staff, repairs and maintenance, insurance and wages for wet days when you cannot drill.

And don't forget to include an allowance for that well that went wrong and after many hours work you had to pull out and start all over again.

Add all these up and you will be surprised at the total and remember we haven't drilled the well yet.

Add the cost of the casing, the welding rods, the screen and then your rig hourly charge-out rate for time taken to complete the well.

Divide the total by the depth of the well and you have a metre rate. Compare this with what you now charge and I wonder how many of you are really getting the return that we work so hard for.

Have a good look at your rig. If you have built it yourself or imported it in

the last few years, have a close look at today's replacement costs. Remember to stay in business, we must keep replacing our equipment.

That runabout that you purchased three years ago for \$8000 now costs \$14,000.

Get a price list from your local hire service and see what they charge for the hourly hire of a compressor or generator or a pump. Relate this to the replacement value of your rig.

Now, how do your charges look? A 3 tonne crane costs \$70 an hour. No risk here, no tricones and drill rods wearing out.

A quantity surveyor costs us \$40 an hour. An engineer, \$42. My solicitor, \$80. No wet days with no income in these professions.

In difficult times, some firms consider cutting prices to get work. But, remember, you then have to do two jobs to make the profit of one. Those contractors who have been the most successful during the last few years are those that have refused to cut prices.

Now, with all these facts in hand and

the knowledge that we are also professionals, are we getting a fair return for the capital involvement and risks we put into this industry? Have a think about this.

As drilling contractors, however, we have one advantage over all other contracting firms. That is, it is a well-known fact that all drillers go to heaven. Why? Because they put up with hell on earth.

Good drilling

Bill Washington

Bill Washington

— WISE WORDS —

A reasonable man accepts the world the way it is and adapts to it. An unreasonable man persists at getting the world to change; therefore, all progress in the world comes from unreasonable people.

— George Bernard Shaw

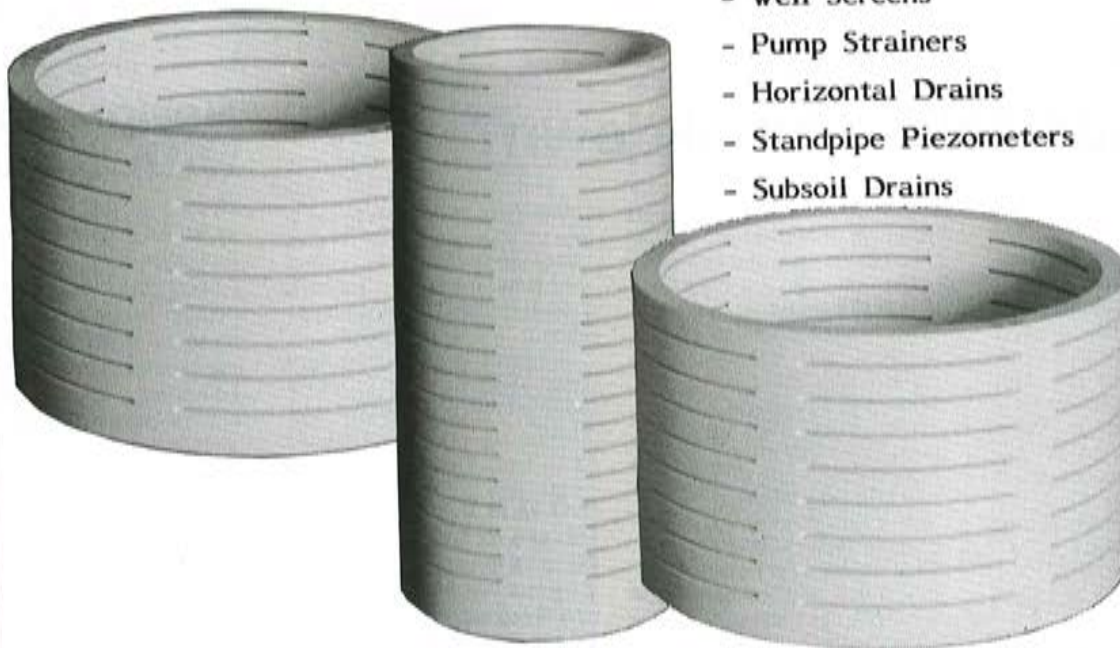


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Learning to master money management

From *Business Today* by Frank Newman, an executive of the Institute of Credit Finance.

WHAT are some of the causes of business failures?

Basically, there are two — bad management and lack of working capital. Management is something that must be worked at and acquired over a period of time. If a person has not got this basic skill to run a business then they should be paying for that expertise through those who have such an ability.

Whether or not the business is that of a limited liability company or a sole trader, the lack of working capital is a gross problem for so much of today's business. The extended period of high interest rates that we have gone through has taken its toll of corporate liquidity and this condition will continue until short and long term interest rates become more manageable by the business that borrows.

If funds are available to a business, what is the cost of those funds both by way of increased drain on the cash flow due to interest charges, and the security to be offered for the privilege? It is sometimes the existence of a prior security that has hindered another lender. Many business people have discovered a more comfortable lender by shopping around and

buying out the original lender in favour of another party.

Now more than ever, the emphasis is on generating funds to combat inflation, and because of the restrictions on borrowing for so many businesses these funds must be accrued by internal means.

For many small businesses, the accounts payable is the prime area where they obtain these funds.

When this happens it is not unknown for the creditor to retaliate by simply withdrawing credit facilities, or if more drastic to commence litigation.

Unfortunately, in the writer's experience not enough small business people approach their major suppliers to negotiate some favourable deal, either by way of extended credit which naturally enough would be interest bearing, or to have some prompt payment discount put into their purchases and thus leave them more margin on the end product.

Again, either of these possibilities would, from the creditor's point of view, have to be on a short term or six month review basis.

There is divided opinion on "thinking big"; yet many consider either merging or joint ventures to their detriment.

Such moves do allow greater utilisation of premises, plant, staff

and experience, leaving, of course, the possible sale of superfluous assets, thus generating cash flow with a saving of overheads.

The time-honoured fashion of mailing out statements merely presenting past due figures will not ensure payment. Putting a reminder stamp on the statement is again questionable.

For the same mailing cost we could send a copy invoice duly marked with a sticker or stamp stating that it was past due.

Destinies

Undoubtedly some readers and small business people will say that all of this will cost time, yet the telephone will work wonders, solve many of the problems, create public relations and will give a cash response.

A further way of creating cash within a business is to have some figure introduced as capital through other shareholding in the business or partnership.

Many small businesses would reject this as they would want to be the master of their own destinies, but experience shows that provided the cash can be injected it could well result in the on-flow of other ideas, incentives and expertise in fields that are perhaps unknown to the founder of the business.

NZ tour cancellation disturbs

NZDF members at its council meeting expressed annoyance at the late cancellation of the Australian drillers post-conference tour.

One council member said the meeting was the first notification he had had that the event, which had involved considerable time and trouble on his part, had been cancelled.

The council moved that the federation write to the Australian National Waterwell and Drilling Association to express concern and to suggest that, in future, perhaps visits could link in with the New Zealand federation's yearly conference.

The Australian visit was to have taken place in October and the itinerary was to have included visits to Rotorua and Wairakei where a geothermal workshop and seminar was to have been held.

Support for future Australian drillers' visits to coincide with the New Zealand conference received a boost from the 12 Australians who visited Timaru for the three-day event in late July. The latest Australian NWDA journal said: "Col Barden of the ADITC commented that the NZDF were very well organised and provided a stimulating event with excellent attendance, at minimal cost, complete with working demonstrations. Sounds like they hit their target."

LETTERS

Communication breakdown?

IT has come to the attention of some council members of NZDF that there seems to be a lack of drilling experience among some consulting engineers operating in New Zealand.

The results of this lack of experience shows in many ways. One complaint is the absence of standardised tender documents which means that drilling contractors are constantly haggling, revising, rewriting and retendering etc. which is time consuming and costly.

Also, specification documents come under fire from other contractors.

It seems to others that any mishap is the driller's fault

rather than a shared problem or a fault of Mother Nature, or the specification of a contract.

The opinions of a small section of drillers is that there certainly is a place for this type of engineer and is mainly concerned with additives in the bottom of the mud pit.

This writer has taken an overall view that in the main the principal of using consultants has a healthy place in the industry but in some cases the costs of drilling escalate when local drilling experience could have been used to better advantage to give the customer a more realistic and financially advantaged product.

The purpose of this letter is not to start a war, but to give everyone a chance to correct and standardise.

Both drillers and consultants alike.

Some of these points have been covered in a proposal adopted and recommended by NZDF.

**S.O.D.D.E.N.
letters to Society of
Disgruntled Drilling
Engineers Nonetheless,
c/o Secretary,
PO Box 1318,
HAMILTON.**

Resignation with regret

Please note that I have sold my welldrilling business to Trigg Welldrilling.

I now wish to resign my membership from the federation. I have had good value from being a member and am sorry to be leaving. The annual conferences were great occasions and am sorry I missed the last two. I hope there is some way of keeping in touch with progress of the New Zealand Drillers Federation.

Here's hoping that the federation keeps going from strength to strength.

**Dave Burgess
DARGAVILLE**

Potash — the bread and butter of Canada's mining industry

IF IT wasn't for vast potash deposits now being mined in New Brunswick, eastern Canada's mining industry would be in the doldrums.

When the first railcars of potash reached port early in January to await shipment to Denmark it climaxed more than a decade of drilling and testing.

But the real story of potash in New Brunswick goes back even further, more than three decades to the early 1950s when it was discovered — and for more than 14 years ignored.

Fertilisers

Around 1954 a group of geological prospectors stumbled on a small salt spring close to the town of Sussex.

The discovery was interesting but really nothing to dance about. There were already several salt mines in the Atlantic provinces and another one might be more than the market could bear.

But the searchers were interested enough to order an analysis of the spring water, just to see what the earth below might have to offer.

When the analysis was complete they became a little more excited. The readings pointed not only to the presence of potentially large sodium chloride (salt) fields in the area, but to traces of potassium chloride (potash).

Though potash, used mainly in fertilisers, was then — as it is now — seven times more valuable than salt, it was not visualised as being present in large enough quantities for mining.

Gamble

For 14 years the geologists and the New Brunswick Department of Mines tried to attract investors. The response was nil and the province, at that time, had no money to gamble on a project so uncertain.

In 1969, with dust gathering on the analysis of a decade and a half earlier, the provincial Department of Natural Resources talked to the newly formed federal Department of Regional Economic Expansion.

Eager to show its willingness to help the province, DREE decided the findings in the

dusty old files were right up their street.

Evidence from the analysis was convincing. There was enough justification for test drilling. DREE offered to pay the entire cost of 3000 metres of drilling up to a maximum of \$NZ373,000. The province was not asked for a cent.

Intricate

One year later, on November 24, 1970, three bids from companies hoping to do the exploratory work were opened in Fredericton.

A North Bay company, with offices in Bathurst, N.B., Inspiration Drilling was awarded the contract with a bid of \$255,000, covering a total drilling depth of 2820 metres.

Gravimetric surveys, intricate and technical machine readings, were made by the advanced geological searchers placed at the site in an attempt to pre-judge the area covered by the salt deposit, even before the drilling started.

A discovery hole was drilled at Plumwaseep, close to Sussex, on January 9, 1971.

By the time drilling ended on February 18, 1971, the geologists knew that they had hit the jackpot.

Thirteen years later, in February 1984, Basil Small, the DREE (now the Department of Regional Industrial Expansion — DRIE) representative on the scene from the start, recalled clearly the cool and calm comment by J K Worth, geologist in charge of the project, as he examined the first core sample brought to the surface from below the 275 metre mark.

"I believe we've cut some potash", he said.

Missed

This simple statement, which soon turned out to be the understatement of all time, was the signal for intensified drilling. Between 277 metres, where the potash was located, and 305 metres, a total of 21 metres of potash was intersected.

Working from the gravimetric survey results, a second hole was started on March 11, 1971, at Penobsquis, eight kilometres from the first site.

They found plenty of com-

mon salt but, as was to be discovered later, the drill hole had just barely missed a rich deposit of potash.

But enthusiasm was high and the drillers were not deterred. When drilling ended on April 28, 1971, a joint decision of DREE and the provincial government had already been made to put the mining rights out to tender.

When November 1, 1971, rolled around, the tender closing date, everyone's hopes had been exceeded.

The invitation to bid, advertised in Canadian and United States newspapers and in world mining journals, brought a response from seven highly reputable and experienced companies and consortiums.

By this time salt was a minor player in the game. Potash was the mineral being sought.

In January 1973, the Potash Company of America was awarded the rights to drill in designated areas near Plumwaseep. DREE, and the province, anxious for the project to go ahead, agreed to provide and pay for a geologist with knowledge of the area to assist the company in any way possible.

On October 26, 1977, 23 years after the first discovery was made, Premier Richard Hatfield announced that the Potash Co had decided to invest \$214 million of its own money in establishing a mine and potash refinery at Penobsquis.

Magnet

By the end of 1981 the company investment had ballooned to \$302 million and the hoped-for 1982 production date was delayed to "early in 1983".

Their decision to go ahead acted as a magnet to other potash producers and a second site at Salt Springs about 20 km from Penobsquis was leased.

Shortly afterwards BP Exploration Canada Ltd was given the nod to make tests at Millstream, 20 km from both Penobsquis and Salt Springs. This site has subsequently proved to be rich in potash.

At the moment potash is the big thing in New Brunswick, and it can only become even better as prices for the potash rise.

Extract from Across Canada magazine

While mines like Heath Steele near Newcastle remain closed waiting for lead and copper prices to improve, and Brunswick Mining and Smelting Corporation Ltd has put a temporary halt on plans to build a \$726.5 million zinc smelter, there are other indications that the mining industry is on the verge of a revival that could create thousands of jobs.

Antimony

Bilton Canada and Brunswick Tin Mines have completed a \$242 million tungsten-molybdenum mine and are almost at production stage.

The antimony mine operated by Consolidated Durham Mines & Resources was closed in 1981 but, as Canada's only producer of this deposit, the company confidently hopes it will be reopened, with a new ore body already located, shortly.

The potash mines are brightening New Brunswick's mineral horizon, perhaps setting the stage for an industry revival that the province's Natural Resources Minister Gerald Merrithew estimates could have revenues annually in excess of \$1 billion by 1990.

Tasman takes on Sunstrand

Tasman Hydraulics, a recently-formed company have been appointed the Australics Sunstrand parts and equipment distributor.

Among the varied range of hydraulic equipment held in their East Tamaki store are brand pumps and valves, Hayden swirl cool heat exchangers, HPI Nichols pumps and motors, Monsun-Tison remote control systems, Sunstrand hydrostatic transmission up to 27 series.

Tasman intends to carry a wide and complete range of equipment to service the industrial and agricultural industries.

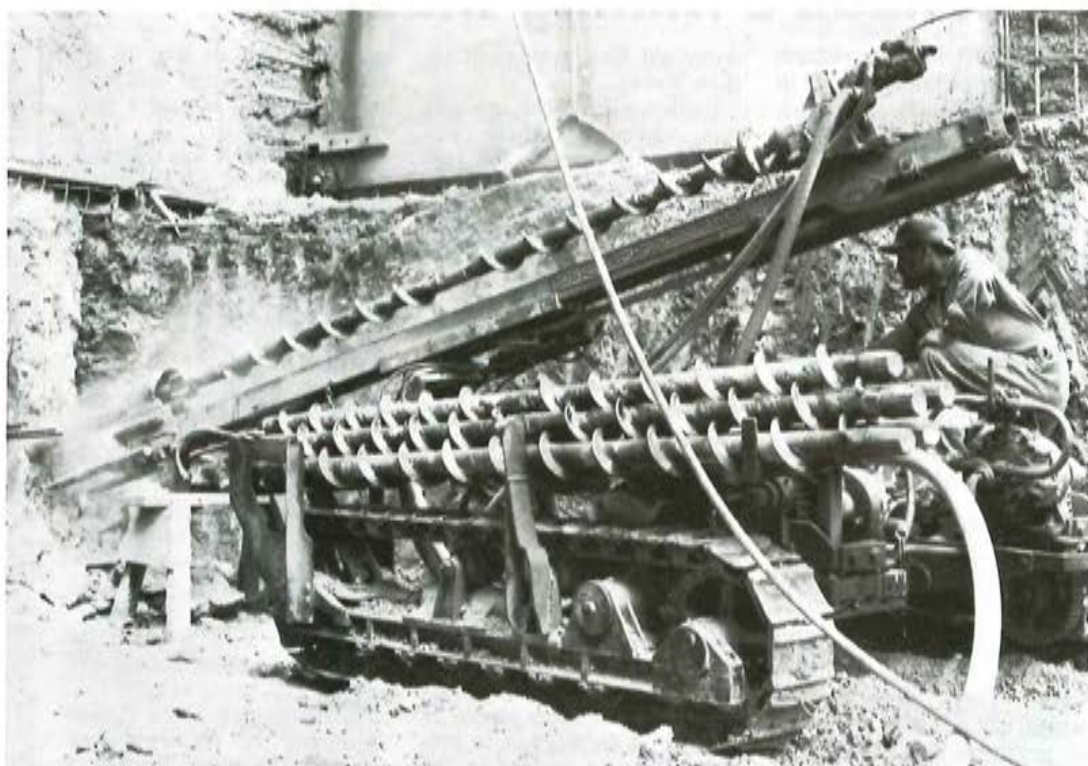
Drillers in deepest downtown

Construction work in Wellington continues at a hectic pace. And at the bottom of it all:

Right, Pope Tipiwal of Lemmon Piling and Drilling Ltd using a Gardner Denver air track drill to install ground anchors to support The Terrace.

Below left, another Lemmon crew using a vibrating hammer to put down a large diameter investigation bore on one of Wellington's pricier pieces of real estate. The land was bought by Renouf Corporation in October for \$7 million.

And right, Dave Sayles of Richardsons Drilling working on the National Insurance building near Wellington's central police station.



Now Masport Onga bring America's biggest-selling submersible pump to New Zealand.



DISCHARGE CONNECTION — Close grained cast iron construction provides smooth water passages for maximum efficiency... incorporates trouble-free bronze poppet type check valve with bronze seat. Non-mechanical design assures years of trouble-free dependability. Design series 40 units include threaded check valve. Cutless type fluted rubber bearing maintains proper shaft alignment and assures superior sand handling capabilities.

STAINLESS STEEL PUMP SHAFT — Precision ground for exact bearing fit and straightness. Full length key-way provides positive impeller drive.

TYRIL IMPELLERS & DIFFUSERS — Precision moulded and dynamically balanced... ultra smooth for highest performance and efficiency.
*Registered trademark — Dow Chemical Co.

DIFFUSER SPACER — Assures precision build-up while maintaining proper internal clearances.

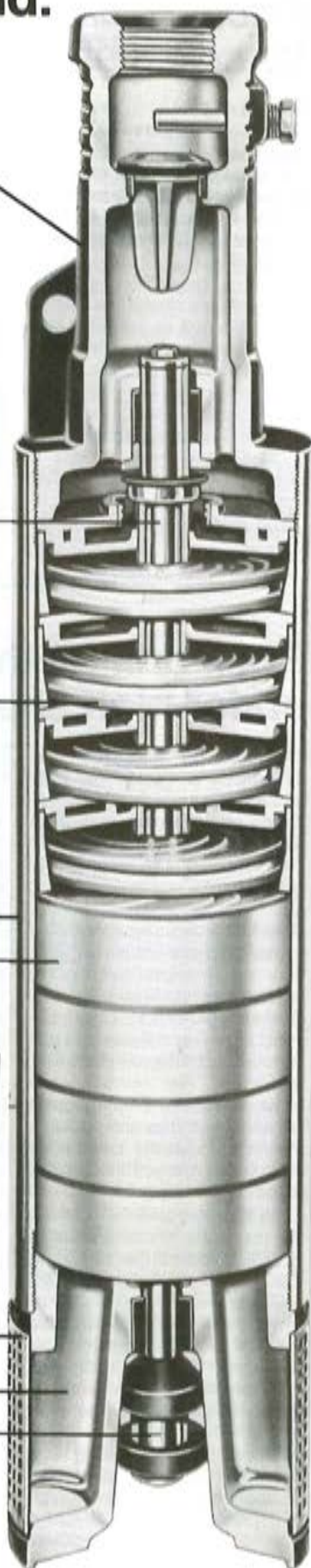
STAINLESS STEEL PUMP HOUSING — Highest grade heavy walled stainless seamless casing for maximum protection against corrosive water conditions.

NON-CORROSIVE INTAKE SCREEN

RUGGED SUCTION CONNECTION — Ductile iron — completely encloses and protects pump-to-motor shaft coupling. Cutless type fluted rubber bearing maintains proper shaft alignment and assures superior sand handling capabilities.

STAINLESS STEEL SPLINED COUPLING — Precision fit guarantees perfect alignment and uniform power transfer... incorporates resilient neoprene spline protectors at both ends of coupling.

TOP QUALITY HARDWARE — Lead guard, screws, nuts, washers and bolts are constructed of non-corrosive materials.



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Sta-Rite motors are oil-filled to run cool and last longer.

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In aggressive conditions, such as sandy water, Sta-Rite pumps are especially reliable. The impeller rings, running their whole length in bronze bearings, restricts sand from the impeller neck... the most vulnerable area.

That's thoughtful engineering!

Sta-Rite pumps can be serviced in the field without factory setting.

That's money-saving engineering!

Sta-Rite pumps are engineered for maximum volume and pressure performance, at minimum energy consumption.

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For professional pump selection advice and the name of your local dealer call now... Masport Onga Pumps, Auckland 572-188.

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Drilling fluid fit for precious lands

NL Baroid's non-toxic invert emulsion drilling fluid system, Enviromul, was the subject of a NZDF conference paper.

Invert emulsion fluids stabilise shale and clay, prevent dissolution of salt formations, minimise formation damage, combat corrosion, and remain stable under high and low temperature and pressure.

The continuous phase of an invert emulsion fluid is usually diesel or crude oil. Other oils, such as coal tar, wood tar, resin, asphalt thinned with benzene, stove oil, and kerosene have been used.

Price, availability, solubility and non-fluorescence are factors which determined the choice of oil.

Recent environmental concerns have made the use of non-toxic oils desirable for invert emulsion fluids used in some places such as offshore, national parks, watersheds and arctic wasteland areas.

The Enviromul system is formulated using a non-toxic white mineral oil carrier and non-toxic emulsifiers Invermul-NT and EZ Mul-NT.

Other standard oil and mud products are added as necessary to control filtration, rheological properties and density.

Enviromul systems may be formulated over the same density range and with the same oil:water ratios as standard systems.

Electric blanket aid for cold starters

AUSTRALIAN Massey-Ferguson engineers have developed a wrap-around electric blanket which is claimed to solve cold start problems caused by the freezing of wax in diesel fuel filters in sub-zero conditions.

Suitable for single or double fuel filters, the device warms the fuel contained in the filter cartridge and liquefies the wax crystals.

It consists of a heater pad which wraps around the filter body and is warmed by an electric current passing through a nickel chrome resistance wire threaded through the pad.

The device is designed to be

switched on 10-15 minutes before the engine is started and to reach a temperature of 50-60 degrees, and to ensure that no further wax forms the manufacturers recommend that it operate for 30 minutes' engine running time.

The kit is marketed in three different versions, ranging from a single filter 60 watt model to single and double filter 120 watt models.

Although each model has a general application, the kits are designed especially for use with CAV, Bosch, Simms and Cummins fuel filters.

Massey-Ferguson (Australia) Ltd are at 2 Devonshire Rd, Sunshine, Victoria 3020.

Blast hole rig for surface mining

MAINLY intended for surface coal mining, the Atlas Copco Rotamec 130, now available in Australia, is a track-mounted, fully hydraulic rotary blast hole drill rig with a pull-down capacity of 170 kN.

Heavy structural design, optimum weight distribution, compact size and a fast hole-to-hole time make the rig an effective alternative for hole sizes 152-200 mm.

Powerful top drive (0-8185 Nm) and wide range of spindle speeds (0-248 rpm), contribute to high drilling rates and efficiency.

Features reducing downtime include turntable for tramming along the bench, two-speed tramming (1.2 km/h at low speed or 4.3 km/h at high speed), rapid speed jacking, rapid cab operated drill pipe changes and provision for tramming with upraised mast.

The Rotamec 130 is powered by a GM diesel engine, and is available with two different compressors for rotary and/or down-the-hole drilling. Equipped with a low pressure screw compressor (an Atlas Copco XAS 400) delivering 400 l/s at 7 bar, the rig is suitable for rotary drilling.

For down-the-hole drilling or combined with the rotary drilling, Rotamec 130 can be equipped with an Atlas Copco XRH 350 high pressure compressor delivering 350 l/s of air at 20 bar.

The rig is available with two mast lengths, one for 7.6 m drill pipes or a long stroke mast for 10.5 m pipes. Both masts are equipped with a pipe carousel for four drill pipes with a diameter up to 140 mm.

A silenced, air conditioned and pressurised cab provides a safe and comfortable working environment for the operator. All controls and instruments for drilling and tramming inside the cab are either pilot servo operated or electrical pilot operated.

Optionally, the mast can be positioned for angle hole drilling up to 30 degrees by means of hydraulically operated angle drilling supports. The unit can also be equipped with a dust collector which effectively takes care of the drill dust by way of a hydraulically raised and lowered dust hood.

When drilling through blasted muck or other non-consolidated formations, the rig can be equipped with a foam water pump.

Rock drill oil thins under high shear stress

CASTROL in Australia has developed a new rock drill lubrication which falls between conventional rock drill oils and rock drill greases.

Castrol rock drill compounds are manufactured as a water in oil or invert emulsion, under controlled manufacturing conditions.

They contain pressure and anti-wear additives, and the dual inhibitor system provides rust and corrosion protection. They have good emulsion stability and are fire resistant, the oil company says.

Castrol rock drill compounds are non-Newtonian and undergo temporary viscosity loss under high shear stress. This has the following advantages:

- Under shear stress conditions the operating viscosity reduces and approaches the operating viscosity of conventional rock drill oils.

- Where high speed and close tolerances are present, the operating viscosity decreases and does not produce 'drag' or unduly slow down the operating speed.

- Where the clearances are large or excess wear is present, the viscosity remains relatively high and provides a more effective seal, so that maximum power and performance are provided.

Extensive field testing, says Castrol, has showed that Castrol

rock drill compounds fare better than conventional types of rock drill oils for the following reasons:

- It has a greater tenacity to hold onto metal surfaces and to resist water wash-off (place some in a glass and test for yourself).

- The nature of the compound provides a neat seal between moving parts.

- It has a natural detergent property; keeps the interior of the drill clean, thus reducing the abrasive action of dirt and deposits.

- The inclusion of extreme pressure and anti-wear additives fortifies the lubricating properties of the compound.

- Castrol rock drill compounds will not mist or form oil fog — a major advantage for operators working below ground or in enclosed areas.

- Castrol rock drill compounds resist dieseling: units work cooler, fire hazard is reduced and the rapid fall-off of the unit efficiency and possible internal damage is reduced.

- Because of the tenacious cover provided by Castrol rock drill compounds and the special inhibitor system, units subject to periods of inactivity are better protected against corrosion.

- Castrol rock drill compounds allow easy dismantling for servicing.

Regulations for overhead power line hazard

NEW restrictions on the movement of cranes and other machines have been included in changes to the Electrical Supply Regulations.

Regulation 93 which came into force in October has caused complaints from some industry groups who say they were not consulted about the changes.

The regulation says the owner or operator of any "mechanical or power operated or mobile or adjustable car crane, loader, excavator, drilling or pile driving equipment" shall not go closer than four metres from any overhead electric line without permission in writing

from the Electrical Supply Authority or licensee notification of the voltage and correct minimum distance.

An approved warning notice, must also be attached near the controls of machinery types described above which reads: "Warning, keep clear of power lines".

These self adhesive labels are available free from Electrical Supply Authorities or Electricity Division offices.

The Power Crane Association has written to Transport Minister Richard Prebble and Energy Minister Bob Tizard to protest at lack of consultation over the regulation.

Conference Photo



Copies of the 1984 Drillers Federation Conference in Timaru are still available from Carrick Studios Ltd, P O Box 326, Timaru, phone 81-657. The prints are colour and are available in 5 x 7 (\$5.50), 8 x 10 (\$8.50) and 14 x 11 (\$12.50). This includes postage.

Search for oil 'pauses' — Tizard

NO NEW petroleum prospecting licences will be granted between now and at least June 30 next year, pending a major review of exploration policy. Energy Minister Bob Tizard has said.

Mr Tizard said the "pause" in granting new exploration licences would in no way affect existing licences, including the assignment of interests in them, or exploration activities planned over the next year.

The review of existing policy was necessary now, following continued monitoring of the provisions of the present four-year-old regime, he said.

"The stage is now set for a fuller review of Government funding involved, and the question of how much the Government should contribute to obtain a significant interest in a licence."

He said officials had been asked to carry out the review by June 30, and report to Government on the fiscal regime for oil prospecting and development.

The review will involve a study of overseas approaches to the various issues and will include some consultation with the exploration industry here in New Zealand.

Mr Tizard said it would be "in-

appropriate" to grant any new prospecting licences while the review was under way. While the review would not affect existing licences, it would give exploration companies more certainty about the conditions which apply to new licences and they would thus be able to carefully assess whether or not they should participate.

"It is expected that some new licence areas will be keenly sought after at the time of compulsory relinquishment of half the areas of existing licences five years after they were awarded. In the case of many of the offshore Taranaki blocks, this will occur in May 1986.

"This pause in the granting of new licences is in no way expected to be accompanied by a pause in exploration activity. In fact, activity is expected to intensify over the next year.

"I emphasise that the Government supports the continuing growth of the petroleum exploration programme and will continue to promote it while at the same time being selective in determining where and how the taxpayers' money is to be spent. Given the state of the economy any other course would be irresponsible."

Energy report speaks of busy year

THE Ministry of Energy annual report was tabled in Parliament last month by Energy Minister Bob Tizard.

The report follows closely on the heels of the Energy Plan which was also tabled recently.

Mr Tizard said the report contained the following main points:

- In 1983-84 New Zealand's oil bill rose \$11 million over the previous year, despite the fact that 380,000 tonnes less oil and oil products were imported. This increased cost was caused by the depreciation of the New Zealand dollar against the United States dollar.
- The Motunui synthetic petrol plant had passed the 50% completion mark.
- The first natural gas went to the Petralgas methanol plant in October 1983.

- In 1983-84 eight natural gas pipeline extensions were authorised.

- The Marsden Point refinery to Auckland white products pipeline was completed in October 1983.

- Offshore exploration for oil and gas in 1983-84 was at a high level, with three semi-submersible rigs operating in New Zealand waters.

Mr Tizard also said that public response to energy planning was extensive during the 1983-84 year.

"Through the Energy Advisory Committee, 54 public submissions on energy planning were received," he said.

The report is available from the Ministry of Energy and Government Print bookshops at \$3.20 per copy.

Turbo V across Tasman

A specialised oil for turbo-charged engines cars which passes American tests for the classification, is now available in Australia.

The oil is Turbo V, which meets the five key tests characterising an API SF/CD rating.

Available in 20W-50, 15W-40, 10W-30 and 30 grades, the oil is

suitable for all car and truck petrol and diesel engines.

The oil, marketed by Valvoline, is a conventional solvent-refined base stock containing relatively small amounts of viscosity improvers and additional antioxidants and detergents — "chemistry" dispersants, rust and corrosion inhibitors which also fight bearing failure.

Hydatids gave company its cue

Twenty-two years ago, the South Island's largest drilling company began operations in South Canterbury.

Washington Drilling Co. was established in 1962 in Washdyke to provide the farming community with waterwells and offal pits. The hydatids eradication scheme had just been introduced and the late Jack Washington and son Bill realised there were opportunities for a company which could drill pits for the quick disposal of offal and dead animals.

And so New Zealand's first large diameter Calweld rig was imported from Los Angeles through local agents Clyde Engineers in Christchurch and Washington Drilling opened for business.

After about a year of drilling disposal pits for farmers in the area, the father and son team tendered to do the piling work for the Reserve Bank building in Christchurch.

Washington Drilling won the contract and it was nine months

later that they finished their first large diameter bore job.

More piling work followed, this time in Dunedin at Burnside Freezing Works for the NZ Refrigerating Co. As the workload built up, more man and machine power was needed. In 1964 the company took on a larger rig and the staff grew to five.

For the next four years or so the company was kept busy drilling the piles for electricity towers from Bannockburn near Cromwell to Molesworth Station in Marlborough for the Kikiwa power line.

In 1973, Washington Drilling expanded and took delivery of a Sanderson Cyclone rotary rig and moved into investigation drilling.

Drilling for New Zealand Cement Holdings at Weston, Oamaru, has been a major part of the company's work ever since.

Another major investigation project for the company was on the upper Waitaki power scheme, a job that took the company three years. Washington Drilling

has also done work on the upper Clutha scheme, coal studies in Southland and Otago, and oil drilling on the West Coast for Petrocorp.

Today the company, headed by Bill Washington, president of the New Zealand Drillers Federation, operates 11 drilling rigs and

employs around 25 people.

Its latest acquisition, a Barber dual rotary rig imported from Canada late last year, is one of the more sophisticated looking machines in New Zealand and attracted much comment when on display at the recent NZDF conference in Timaru.



Two generations of Washington's — Drillers Federation president Bill, far right, watches while nephew Bruce, on platform, operates the company's Barber rig.

Owners...operators...users

this notice must, by law, be fixed...

as near as practicable to the operator's position on any mechanical or power-operated or extendible crane, loader, excavator, drilling or pile-driving equipment, or any other type of equipment, such as concrete pumps, cherry pickers, irrigation booms... In fact any type of mobile or adjustable equipment or machine capable of extension far enough to come within 4 metres of any overhead power line.

Supplies of these self-adhesive warning stickers are available free from your local Electrical Supply Authority or Electricity Division Office.

Remember! You must now comply with this new Regulation. It came into effect on 1st October 1984.



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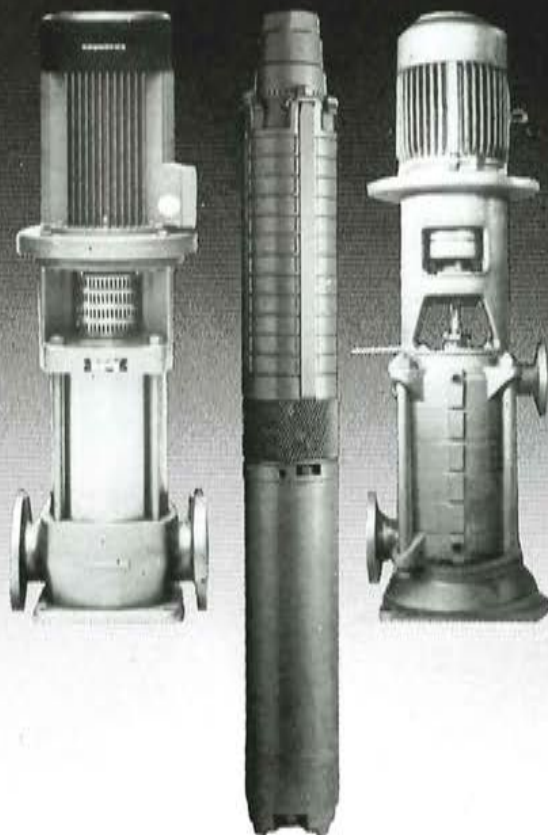
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