

## US visit sparks important developments

WALLY and Lesley Crawford's recent trip to the USA was an unqualified success, giving them valuable insight into the latest laboratory equipment available, bringing them a step closer to the formation of an eight-nation International Wearcheck Group, and finalising Wearcheck South Africa's accreditation as the official oil analysis laboratory for Garrett USA's jet engines in Africa.

### Pittcon '93

First stop was Pittcon '93, the world's biggest conference and exposition on analytical chemistry and applied spectroscopy, which attracts about 1 000 exhibitors and over 30 000 visitors from across the globe every year. Held in Atlanta, Georgia, Pittcon showcased the finest and most complete exhibition of modern laboratory equipment, instrument supplies and services available internationally.

Said managing director, Wally Crawford, "We spent two full days looking at the exhibition and it was encouraging to note that Wearcheck has some of the best equipment available."

### International Group

Next on the itinerary was a meeting of the eight-member International Wearcheck Group (IWCG), the biggest international grouping in the oil analysis industry. Organ-

ised by Wearcheck USA's Spectro Metrics to coincide with Pittcon, this was the second meeting of the eight Wearcheck companies from Australia, USA, Canada, South Africa, Belgium, Spain, Germany and the United Kingdom.

The purpose of the meeting was to compare notes, pool ideas and compile a charter formalising the IWCG which is likely to be finalised at the group's next meeting in Germany in 1994.

"After so many years of isolation in South Africa, the formation of the IWCG is a powerful tool, giving us access to an international pool of technology and experience," commented Wally.

### Testing

A useful exercise undertaken by the IWCG is the quarterly testing of samples to measure the accuracy of each company's analysis. The results are then collated for the information of all group members. Wearcheck's results consistently compare favourably with the other group companies.

"We are satisfied that our operation is on a par with the other members of the IWCG," said Wally. "In some respects, for example our Infocheck system, we are more advanced."

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**Customer commends  
Wearcheck reliability - Page 2**



Lesley and Wally Crawford halt their busy schedule for a moment outside the offices of Pyramid Technology near San Francisco, during their recent trip to the USA.

## International Condition Monitoring Congress

**STILL ON THE** international front, technical director Lesley Crawford has been selected as a member of the organising committee for Condition Monitoring '94, a conference which will be held in Swansea, Wales, in March next year.

Aimed at management, maintenance and production engineers in the broad field of condition monitoring and maintenance management worldwide, the conference will focus on advances in technology and trends with emphasis on:

- Lubricant analysis
- Vibration analysis
- Wear debris analysis
- Non destructive testing
- Performance monitoring
- Sensor technology
- Management programmes

"My task is to stimulate interest in the conference in South Africa and abroad both from researchers who might wish to present papers and from people working in the field who would benefit from visiting the congress," said Lesley.

A major feature of the conference will be a trade exhibition of equipment from instrument manufacturers and laboratories associated with condition monitoring.

Anyone wanting to know more about the conference should telephone Lesley Crawford on (031) 700-5460.

# Customer commends Wearcheck reliability

A REGULAR user of the Wearcheck system is Charles Hosmer, technical director of Fraser Alexander at Boksburg who says oil analysis is a vital tool in the quest for maintenance efficiency and cost-effectiveness.

"Because our machines are constantly operating in unfriendly environments, our mechanics daily face a wide range of maintenance problems. We rely on Wearcheck analysis and diagnosis to help them pinpoint problems as quickly as possible.

"The Wearcheck service is reliable because the laboratory instruments and procedures prevent erroneous diagnosis based on ambiguous results, as the following case study illustrates."

## Case 580H Transmission

Results of tests on five samples of oil indicated apparently normal wear patterns:

	Oil service (Hours)	Iron (ppm)	PQI
1.	374	101	51
2.	1 000	177	106
3.	1 250	301	368
4.	1 000	52	31
5.	442	92	142

Iron concentration in parts per million represents particles smaller than 15 microns. The particle quantifier index represents all particles of magnetic iron, irrespective of size. Sources of iron in this transmission are gears, bearings and clutch plates.

Comparison of samples 1 and 5 (approximately similar oil

service periods) shows similar iron concentrations and acceptable PQI readings.

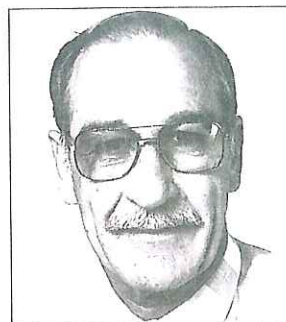
Comparison of samples 2 and 4 (same service periods) shows decreases in iron concentration and PQI.

When interpreting results of this nature the diagnostician is looking for rapidly increasing trends. The results outlined above suggest that the transmission is wearing normally.

However, a further standard Wearcheck test on transmission samples, the particle count which also looks at non-metallic particles, showed that the non-metallic components of the transmission were wearing abnormally. Particle counts per millilitre of oil undertaken by Wearcheck on the two most recent samples:

		Particle size (microns)					
		>5	>10	>15	>20	>25	>50
4	50 157	24 415	3 404	575	252	15	
5	72 513	41 492	15 334	4 507	1 359	37	

This clearly indicated a rapid change in the particle counts on sample 5 in all sizes, and prompted a microscopic examination of wear particles filtered from the oil. This confirmed abnormal wear was taking place. Fraser Alexander was advised accordingly and they were able to use the information to take corrective action.



Charles Hosmer, technical director of Fraser Alexander.

## US visit

### From Page 1

The Crawford's stay in Atlanta ended on an exciting note as "the blizzard of the century" hit the city, confining them to their hotel room for three days amid whirling snow, high winds and icy temperatures.

### Garrett deal

Garrett General Aviation Services is a division of Allied Signal Aerospace Company based in Phoenix, Arizona. Manufacturers of jet engines for executive jets and helicopters, they currently have 150 engines in South Africa. Once they are satisfied that Wearcheck meets their international laboratory and diagnostic standards, the agree-

ment accrediting the company as the official laboratory for their aircraft in Africa will be finalised.

Visits to a Caterpillar dealer in Kentucky; other oil analysis companies and equipment dealers in Indiana and Ohio; and Pyramid Technology in California which supplied Wearcheck's new computer, provided valuable networking opportunities. While in Atlanta, Wally and Lesley met Hans Eichenberger from Caterpillar's Geneva branch who recently described Wearcheck's analysis as "outstanding".

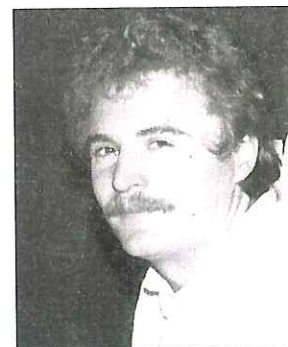
"We will continue to make every effort to keep abreast of international trends and developments in the industry," said Wally. "We also look forward to hosting the International Wearcheck Group in South Africa in 1995."

## Full-time technical advisory service for Reef

WEARCHECK customers on the Reef now have improved access to technical support with the recent move to Johannesburg of formerly Durban-based diagnostician, Gary Blevins.

Says Gary, "Although we have always offered a personal technical advisory service to our Transvaal clients, these trips were planned several weeks in advance. Now, I will be on hand to respond and react to their needs on the same day if possible."

An added benefit is that, being based permanently in Johannesburg, Gary will have more time to devote to cus-



Gary Blevins

tomers' problems.

Gary brings a wealth of practical experience to his new position. Having obtained his National Diploma in Mechanical Engineering from the Natal Technikon, he spent seven years as a diesel mechanic for NMI where he completed his apprenticeship. He has been a diagnostician and technical advisor for Wearcheck for three years.

# JOHANNESBURG OFFICE MOVES

WEARCHECK'S Johannesburg branch moved to an attractive new office complex in Bedfordview at the end of June.

## Training

"Our spacious new offices will enable us to set up a training facility for clients and will also give us room to expand," said managing director, Wally Crawford.

Although details of courses to be run have not yet been finalised, technical director Gary Brown outlined the company's plans: "We hope to run a variety of courses for between 12 and 20 customers at a time, depending on the topic to be covered."

"We will be instructing clients on how to take samples

correctly and how to use the information provided on our reports, so that they receive the maximum benefit from our service," he said.

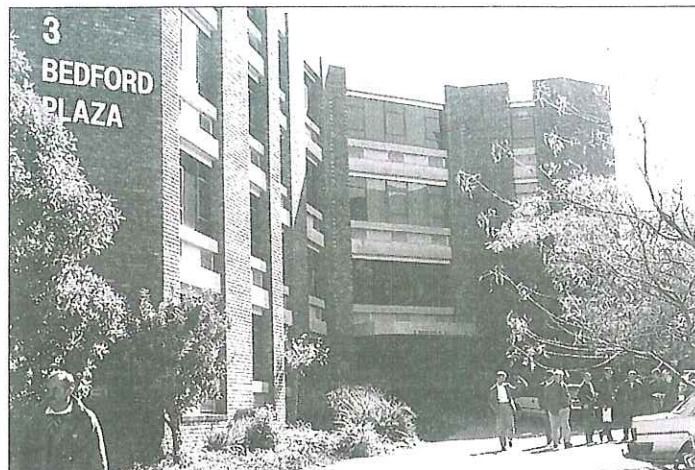
## Troubleshooting

Another course will cover troubleshooting - advising customers on how to solve the problems detected during oil analysis.

General courses on lubrication, filtration and general maintenance practices will also be on offer.

"These courses are aimed at training technical staff to keep their equipment in the best possible running order so as to minimise the problems which arise from bad maintenance habits," Gary explained.

Wearcheck's Infocheck



This modern Bedfordview office complex is the new home of Wearcheck's Johannesburg branch.

## Infocheck

system will be the focus of another seminar designed to help clients get the best out of this computer programme which links their company to Wearcheck's sample analysis reports.

A small fee will be charged for each course and a certificate of competence will be given to everyone who completes the course.

## New Jo'burg address

**THE NEW address and contact numbers for the Johannesburg office are:**

**3 Bedford Plaza  
Skeen Boulevard  
Bedfordview  
2008**

**Tel: (011) 455-3342**

**Fax: (011) 455-4909**

## Blood, sweat and cheers at Comrades

IT WAS ALL systems go at the Wearcheck refreshment station at this year's Comrades Marathon. With laboratory precision more than 50 Wearcheck employees (ably aided by friends and relatives) rolled up their sleeves and set to work meeting the exacting requirements laid down by the marathon organising committee: refreshments tables were to be placed in a certain order, energy drinks had to be one third full, chocolates needed to be cold and unwrapped, and water troughs had to be waist high and sterilised at regular intervals.

## Rewarding

From 7am till the last runner passed the station at about 2:30 pm, the "production line" kept going. Helpers with breath to spare offered the runners words of encouragement like, "Vasbyt!" "Keep going!" and "You're almost there." Those that weren't at the roadside were kept busy replenishing drinks, cutting oranges and giving "rubs" to runners suffering from cramps.

At the end of the day it was hard to tell the difference between the runners and the helpers as they looked equally exhausted, but all agreed that it had been an exciting and thoroughly rewarding day.

Congratulations to Wearcheck's John Wasserfall who man-



Smiles from the Wearcheck team which ensured that Comrades runners were well cared for as they descended Fields Hill.

aged to complete the race for the first time with 20 minutes to spare. Better luck next time to first-timer Lin Moodley whose knees gave in on the punishing Cowies Hill.

Customers who took advantage of Wearcheck's offer to transport runners to the start of the race were most appreciative, describing it as "a wonderful gesture."

With the last word is managing director Wally Crawford. "As this year's winner Charly Doll said, the Comrades Marathon is an incredible experience. We were delighted to be a part of the event and salute all those who participated in the race."

# Three chemists ensure lab accuracy

WEARCHECK has no fewer than three qualified chemists to ensure the highest standards of laboratory testing and analysis.

Leading the trio is technical director and founder of Wearcheck, **Lesley Crawford**, who obtained her Masters degree in chemistry from the University of Natal. A Natural Scientist, she is registered in Britain as a Chartered Chemist and is a member of both the Royal Society of Chemists in the UK and the South African Chemical Institute.

**Alistair Geach**, Wearcheck's laboratory manager, also completed his B. Sc in

chemistry and applied chemistry at the University of Natal.

Laboratory management has always been his forté - he began his industrial career in the vegetable oil and rubber industry before changing to lubricants on joining Wearcheck in 1992.

Diagnostician **John Evans** qualified with a B. Sc in chemistry at Southampton University in England and takes full advantage of the valuable experience he gained establishing oil analysis laboratories for Caterpillar subsidiaries in Botswana and Zimbabwe before joining Wearcheck four years ago.



Wearcheck's three chemists at home in the laboratory. Left to right: Alistair Geach, John Evans and Lesley Crawford.

## New Johannesburg sales executive



Steve Patmore

STEVE PATMORE, Wearcheck's new sales executive in Johannesburg, believes in the professionalism of selling.

### Partnerships

"Building partnerships with clients and establishing long-term, mutually beneficial relationships is my objective," he says.

Steve has a strong background in sales management. He spent eight years as

National Sales Manager for Micrographix selling microfilm systems and doing sales training. He was also Sales Manager for office furniture manufacturer Furnsteel for four years.

A psychology graduate, Steve is a keen observer of people which he believes makes him sensitive to people's needs and improves communication with customers. In 1983 he completed

the Management Development Programme at Unisa's School of Business Leadership.

### Powerful

Steve's comprehensive selling experience backed by sound technical support from Gary Blevins and Lin Patterson's customer services skills will make for a powerful team in Wearcheck's Johannesburg office.

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Type of Business.....

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## Where to find us

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