

BRAND NEW LAB FOR WEARCHECK



MONITOR ISSUE 63

WEARCHECK
CONDITION MONITORING
THROUGH OIL ANALYSIS

WearCheck's brand new state-of-the-art oil analysis laboratory in Isando is set to process its first samples in September, making a smooth transition from the old lab nearby, which closes at the end of August.

Strategically positioned adjacent to the existing WSL (WearCheck Speciality Laboratory) on the premises of parent company Set Point, the new laboratory is poised to process a burgeoning client base in the greater Gauteng region.

Managing director Neil Robinson is optimistic about the new facility. 'The growing demand for oil sample analysis in the surrounding region confirmed our decision to make a capital investment and duplicate the laboratory instruments which have the highest workload. An increase in laboratory capacity required greater space than we had at our old laboratory. After twelve years of doing so, the decision was taken that, as of the end of August, WearCheck would no longer process samples for Barloworld – the site of our old lab. The new lab is a natural progression in WearCheck's commitment to bringing our service to our customers.'

Make the seamless move to WearCheck

'The system at the new lab works exactly as before, and is set up to retain all customer codes and sample history for existing clients. For those customers who were using our services via Barloworld/Caterpillar, we invite you to make the seamless transition to dealing directly with WearCheck in the future,' says Neil.

The changeover process from Barloworld to WearCheck couldn't be simpler. All you need to do for your next order is contact a member of WearCheck's Customer Services team and place your order for WearCheck bottles. Other than a change in bottle colour, everything else remains the same - you can even continue to use your existing customer code.

There is no need for re-registration or retraining, and your reports will continue to go to the same people as before. You will also be able to access your reports online, through NetCheck or via emailed PDFs, as always. The new lab already has ISO 9001 certification, and its close proximity to the WSL fuel lab is an added convenience for customers who utilise both services.

Experience with most OEM makes and models

Standing by is WearCheck's highly experienced diagnostics team, which boasts a collective 120 years' experience and several million samples between them, with invaluable insight into a wide range of industrial and plant OEMs and brands, and the different trends unique to each.

Says Neil, 'A source of pride for WearCheck is the fact that our diagnosticians are "multi-lingual" – their experience is not limited to only one brand or make, but covers every conceivable machine that has oil-wetted components.'

WearCheck has amassed a database of over 10 million samples since it first began processing samples 38 years ago – a treasure trove of historical information which is regularly accessed during analysis to determine comparative trends in test results.

The new lab has bigger and better testing capacity with over 15 high-tech instruments, featuring several viscometers, particle counters, a particle quantifier (PQ), inductively coupled plasma (ICP) and Fourier Transform Infra-red (FTIR) spectrometers, a gas chromatograph (GC), an XRF and potentiometric titrators, to name a few.

Core business

Neil believes independence is key in an analysis-driven business. 'WearCheck's philosophy is to focus solely on our core business - oil analysis and condition monitoring. We have not added on non-core services such as the sale of machinery or lubricants, rather, we have retained our independence and become highly specialised in our field. It is this lack of conflict of interest that has ensured the trust of our customers, and the fact that our products, services and branded kits are exclusively in the best interest of our customers and their businesses,' he said.

With specialisation comes recognition for WearCheck's work from several national and international quality regulation bodies (see story on page 2).

Although we now have a presence in seven countries and a growing international network of laboratories, WearCheck is a born and bred South African company, with local resources which are easily accessed.



An artist's impression of WearCheck's brand new laboratory in Johannesburg - the laboratory features cutting edge instrumentation and is set to offer all the standard oil and fuel analysis services as well as additional, specialised condition monitoring techniques

SANAS GIVE THUMBS UP TO WEARCHECK

ISO 17025
ACCREDITED LABORATORY

WearCheck has added another international accreditation to their collection – they were recently awarded the ISO (International Standards Organisation) 17025 accreditation for their fuel and transformer laboratory following assessment by SANAS (South African National Accreditation System).

This maintains WearCheck's status as the only condition monitoring company on the African continent to earn ISO 9001, ISO 14001 certification and now ISO 17025 accreditation.

ISO 17025 was developed to give recognition to testing and calibration laboratories for their capabilities and areas of competence. All tests must be based on 'accurate, repeatable, verifiable, cost effective, timely, and believable measurements, opinions, and recommendations'. Only an ISO 17025-accredited laboratory can guarantee that these criteria are met 'first time, every time.'*

To meet the requirements for ISO 17025, a laboratory must demonstrate competence of testing as well as calibration, and must undergo rigorous inspection of its entire sample processing system from start to finish, as well as its instrument calibration systems.

Laboratory chemist at the WearCheck Specialty Laboratory (WSL) in Johannesburg, Mark Govender, undertook the liaison with SANAS and oversaw WearCheck's compliance with the rigorous requirements for ISO 17025.



WearCheck was recently awarded ISO 17025 accreditation for their fuel and transformer laboratories, maintaining their status as the only laboratory on the African continent to have ISO 9001, ISO 14001 certification and now ISO 17025 accreditation. Proudly displaying their accreditation certificate are WearCheck managing director Neil Robinson and laboratory chemist Mark Govender

Govender is proud of WearCheck's achievement, particularly as it underwrites the absolute reliability and consistency of laboratory results. 'When customers see our ISO 17025 certificate, they know that they can rely on WearCheck's lab results 100 per cent. This is a critical element of any condition monitoring programme, as many key decisions on maintenance are driven by data derived from lab tests.'

WearCheck was the first oil analysis company in Africa to receive ISO 9000 quality certification 15 years ago, and upholds this endorsement through ongoing recertification, currently ISO 9001: 2008.

Seven years ago, WearCheck was awarded ISO 14000 Environmental Management System certification in recognition of its adherence to the code that regulates how companies interact with the environment, including efforts to recycle waste materials and the disposal of waste that cannot be recycled in an environmentally responsible manner.

WearCheck managing director Neil Robinson is committed to implementing and maintaining the internationally-recognised quality standards to ensure the quality of work produced, as well as providing peace of mind to customers.

'The ISO systems are process-driven, and not person-driven, which eliminates error margins - and these processes are then easily replicated in all our laboratories and branches. This enables us to benchmark the operation competitively against current international standards, and gives customers absolute confidence in the quality and accuracy of test results,' says Neil.

In addition to the ISO ratings, WearCheck's services are endorsed by several other international bodies - their marine oil analysis programme is certified by Paris-based Bureau Veritas and Lloyds of London Register, while Honeywell International has certified WearCheck for spectrometric aircraft oil and filter analysis.

* Reference: ISO 17025 laboratory accreditation website: <http://www.pqa.net/ProdServices/ISO/ISO17025.html#What%20is%20ISO%2017025>

LUBE TIP

"Relating to gearboxes on trucks, if the owner/ driver doesn't know if the gear lubes are synthetic, is there a fool-proof way to determine this without having to send a sample to the lab? Some oil manufacturers colour their synthetic oils, while others don't. What would happen if the oils were to be mixed or topped off with the wrong oil?"

The colour of the lube is simply a dye. There are no standards, and manufacturers can and do change colours whenever they please. Unfortunately, there is no reliable way of differentiating between mineral and synthetic in the field. However, because synthetic base oils are white (meaning transparent) as compared to mineral oils, which have a darker natural colour (due to aromatics, sulphur and other impurities), this may be a distinguishing factor. Note, however, that despite the fact that the base oil of a synthetic is white, the additives can add considerable colour (darkening) to the finished oil. In the laboratory, you could distinguish synthetics from mineral

oil by looking at a combination of physical properties including VI, flash point, pour point and aniline point. There may also be different elemental additive chemistry.

Generally, in the type of application you are talking about, the synthetic gear oil will likely be polyalphaolefin (PAO) based. PAOs are very similar chemically to mineral oils, so mixing the two should not cause a compatibility problem, especially if both oils are the same API classification. However, if a synthetic is required, such as for cold-temperature operation, using a mineral by mistake may cause other problems.

Also, be aware that in industrial applications, some synthetic gear oils are polyglycol (PAG) base stocks, which are chemically incompatible with both PAO synthetics and mineral oils. In this case, mixing will result in serious incompatibility issues.

NEW THERMOGRAPHY AND VIBRATION DIVISION

WearCheck recently added a new facet to their comprehensive range of cost-saving predictive maintenance applications in the form of a new division - Reliability Solutions - specialising in vibration and thermography condition monitoring techniques.

Managing director Neil Robinson feels that through this new division, customers have access to a value-added selection of monitoring technologies. 'By expanding the range of advanced testing capabilities, we offer our customers extremely reliable, telling data, on which to base important plant maintenance decisions and optimise the availability of machinery.'

Heading the new division is Reliability Solutions manager Philip Schutte, who brings with him over 18 years' experience in the specialist fields of vibration, thermography and condition monitoring implementation and optimisation.

Some of the new services include on-line monitoring diagnostics, alignment, balancing, tribology as well as other specialised techniques, namely ODS (operational deflection shape) and resonance tests using transient and impact analysis.

Says Schutte, 'We use specialised testing, innovative investigative techniques and new technologies to ensure that our customers' assets reach their projected life expectancy and beyond, and to increase plant availability. We also perform pro-active services such as laser-alignment, in-place balancing and gear profiling - on both pinion and girth gears of large or small mills - to reduce premature failure due to incorrect gear tooth loading, spalling and incorrect pressures.'

Tailored condition monitoring services for plant and mining equipment are enhanced through the new division, using advanced methods

such as structural resonance, transient analysis and motor current signature analysis; in-situ balancing, alignment and ultrasonic services. The new division also specialises in thermal monitoring of electrical equipment, reticulation and building wiring circuits.

Schutte believes in the value of investing in vibration and thermography to optimise the returns of a managed condition base maintenance programme.

'The introduction of one such technology - infrared monitoring - has been shown to significantly reduce maintenance costs by preventing catastrophic failures and unplanned down time caused by electrical and mechanical faults or unusual operating conditions.

'For example, an inefficient transformer cooling system can be costly to maintain - thermography can address this by identifying blockages in the cooling system, which must function properly to enable the transformer to maintain its ideal operating temperature. Inefficient heating or cooling systems use too much energy - a cost which can be reduced through effective thermographic monitoring,' he said.

Condition monitoring can identify abnormal conditions - such as faulty electrical connections, misalignment, early detection of bearings and gear problems, blockages and leaks in the circulation systems - and thereby remove unnecessary extra costs from the maintenance budget. Using known data of the machinery, such as normal operation, heat generation and vibration levels, technicians are able to pinpoint electrical, mechanical or flow induced problems which may lead to premature or catastrophic machine failures.

Schutte explains, 'Qualified and experienced WearCheck technicians analyse variations in



Employing the latest specialist vibration and thermographic testing techniques, WearCheck's new reliability solutions division works to ensure that machinery reaches its projected life expectancy and beyond, where possible; and to increase the reliability of plant. Here, vibration and oil technician Marcelle Symons takes a vibration reading from a Bell B45D dump truck enrolled in the new programme

condition monitoring data such as vibration spectrum and time waveforms, and compare parameter profile trends against "baseline" trends such as temperature and specific frequency bands i.e. bearing, gear and electrical frequencies - also known as frequency bands or parameter profiles - instead of variances in overall levels.

'On-going monitoring of these signatures or parameters can indicate problem areas in their very early stages, enabling planned action to be taken to avoid catastrophic breakdown or downtime. Schutte asserts the importance of understanding why the variation in the data occurs, to prevent over-maintaining or unnecessary downtime of plant and equipment. 'We therefore report on the rate of change rather than changes in trending data.'

HEART-WARMING TALES

Once again WearCheck employees have reached deep into their own pockets to assist those in need. The orphans at St Vincent's Children's Home in Mariannhill were treated to a day of chocolatey Easter delights contributed by staff. Money was collected via a raffle, with WearCheck matching the money raised.

And, thanks to the generosity of the WearCheck team, 200 needy people who would otherwise have gone cold this winter, will now receive blankets via the East Coast Radio's Winter Warmth campaign.



Francis Berner (right) of WearCheck marketing hands over a cheque to East Coast Radio's Darren Maule, as part of their Winter Warmth Campaign



Orphans at St Vincent's Children's Home enjoyed Easter treats thanks to support from WearCheck. Handing over the chocolates to the delighted children are WearCheck staffers Preshnie Govender (red shirt) and Charmaine Thumbiran (black waistcoat)

NEW TROUBLESHOOTING TOOLKIT DETECTS PROBLEMS



WearCheck's technical support consultant Herman Geldenhuys displays the new mobile troubleshooting toolkit that he has developed. When abnormal wear problems are detected through oil analysis, a WearCheck technician brings the toolkit on-site and assists customers to identify the cause of the component wear

A new dimension to WearCheck's traditional oil analysis service brings relief for customers with troublesome components, through the introduction of a mobile troubleshooting service.

Until recently, customers sent oil samples to WearCheck for analysis and diagnosis. A normal result meant operations continued uninterrupted.

However, reports indicating abnormal symptoms meant customers had to investigate and fix the source of the problem, which caused difficulties for operations without the necessary resources to conduct the repairs.

Now, a specially-trained WearCheck technician with a diagnostic toolkit can be called on-site to investigate, identify and evaluate problems.

Technical support consultant for WearCheck, Herman Geldenhuys, who developed the troubleshooting toolkit, explains, "Typical customer reactions to problematic reports were: "What do we do? How do we do it? We don't have the skills - the tools - the knowledge - we need help!" The mobile troubleshooting clinic evolved in response to these

calls for help. 'Our on-site diagnostic equipment identifies symptoms such as blow-by, low oil pressure, coolant leaks, crank shaft float, exhaust pressures and abnormal operating temperatures. An evaluation report then equips the customer's technicians to isolate and rectify the faults.'

Geldenhuys believes the new service has additional benefits. 'Prior to purchasing pre-owned equipment, WearCheck's mobile troubleshooter can test, evaluate and verify the quality of the unit. 'Furthermore, the troubleshooting service can determine the necessity (or not) of conducting costly periodic machine overhauls or re-builds.

Says Geldenhuys, 'Sometimes, customers do not gain the true potential savings of an effective oil analysis program due to skills or equipment shortage. The new mobile troubleshooting service aims to address this, and take traditional diagnostic oil analysis to the next level by extending condition monitoring to incorporate an on-site repair dimension.'

For more information, please visit www.wearcheck.co.za, or call Herman Geldenhuys on 083 628-9404.

OUT & ABOUT TRAINING

Several diagnosticians from the WearCheck team were invited to conduct training courses and present papers at various recent gatherings.



Diagnostician Gert Nel spoke at the Switchgear & Transformer Maintenance Conference in Johannesburg recently



Diagnostician Steven Lumley ran several oil analysis training courses for customers in Dubai. As condition monitoring is critical for optimum plant maintenance in the sandy desert region, people travelled from several locations in the Middle East to attend the sought-after courses



Diagnostician Quinton Verster presented a selection of intense training courses for Richards Bay Minerals over nine days, ranging from basic sample taking to the more advanced oil analysis methodology



SET POINT AWARDS

Once a year the Set Point Group recognises those companies among its members that have made a positive contribution to the group. This year, WearCheck was awarded two prizes – the Best Finance Division award and the Best Health and Safety award. Here, WearCheck managing director Neil Robinson proudly displays the trophies



NEW XRFs GIVE WEARCHECK LABS THE EDGE

Two brand new imported X-ray fluorescence spectrometers (XRFs) began processing fuel samples this month in WearCheck's Johannesburg laboratory. One of the XRFs is earmarked for the Kitwe, Zambia laboratory as that facility gears up to analyse fuels.

The new sample testing capability offers direct benefit to industries where the monitoring of diesel plays a key role in plant maintenance, including mining, construction and transport.

Paul Swan, who manages several of WearCheck's laboratories, believes the company's capital investment in the new analysers offers customers access to an enhanced and unique condition monitoring service using XRF technology.

Swan elaborates, 'The XRF uses X-rays to measure the amount of sulphur in fuel. The technique is highly sensitive and can detect and quantify sulphur in the low parts per million range (<3ppm), and is therefore suitable for current 500 and 50 ppm sulphur ranges in diesel. This stands us in good stead for when these limits drop further following the trend in Europe.

'WearCheck's investment of over half a million

Rand on the new XRFs reinforces the company's commitment to engaging the best technology to produce optimally reliable laboratory results. Furthermore, the new XRFs comply with SANS 342 (South African National Standards), which legislates diesel specification.

'As XRF is the industry-approved method for determining sulphur in fuel, it allows customers to have greater confidence in our results; and to know exactly when to take remedial action based on the readings of sulphur levels.

'XRF technology's chlorine-testing capability also has environmental benefits, for example, testing prior to acceptance of used transformer oil before regeneration and purification. The quick chlorine-level test indicates clearly if the oil is contaminated with PCBs (polychlorinated biphenyls), which are environmentally unacceptable. Thus, a consignment of contaminated oil can be rejected.'

Prior to introducing XRF technology, WearCheck made use of equally reliable, but slower test methods. The XRF test results are often available very quickly.



WearCheck laboratory supervisor Shiven Brijlal uses one of their two new X-ray fluorescence spectrometer (XRF) analysers to test for the elements sulphur and chlorine content in fuel and oil samples. The new XRFs, which are installed in WearCheck's fuels laboratories in Gauteng with one to follow in Zambia, have boosted service delivery by yielding highly accurate results in record time

LONG SERVICE LAUDED



Eva Francis



Neil Robinson



Isaac Mabaso



Collin Naicker



Shireen Brijlal

We salute those members of the WearCheck family who have served the company loyally over many years. Reaching important milestones recently are:
25 years: Eva Francis (DP) • **15 years:** Neil Robinson (MD), Isaac Mabaso (Joburg), Collin Naicker (DP) and Shireen Brijlal (lab)
10 years: Peter Carty (customer support), Paul Swan (laboratory), Shashay Rampersadh (diagnostics) and Elsie Zanele Mbambo (finance)

TWENTY YEARS, AND COUNTING...

On the 15th of June 1992 (twenty years ago), WearCheck moved from premises in central Pinetown into the current offices and purpose-built laboratory in Westmead. Many of the staff members who were there to witness that move are still employed by WearCheck to this day. They are pictured here, from left: Pearl Joseph, Wellington Ndlovu, Prinda Narasi, Eva Francis, Sizwe Ndlovu, Sheila Moodley, Lynn Gengan, Sheila Naidoo, Vigie Manikum, Melanie Hynd, Trevor Pillay, John Evans, Patricia Gumbi, Rowan Maartens, Happiness Hlope and Lorain de Bruin



**WIN
WITH
WEARCHECK**

The annual WearCheck customer survey 2012 will be sent out to all our customers in August. We really value your input, and use your feedback to improve our service to you. Thank you, in advance, for taking the time to complete the questionnaire. All completed forms are entered into the lucky draw for an exciting grand prize – so make sure to send in your completed form, to stand a chance of winning.

TECHNICAL TIP

BASE NUMBER - A 'MUST-KNOW' ON ENGINE OILS

By Paul Swan



Paul Swan, who manages several of WearCheck's laboratories

Engines produce acid when they operate. The acid comes from oxidation of sulphur in fuel and the formation of nitrous by-products as a side reaction to the combustion cycle. These gaseous products land up in the sump of engines as sulphuric and nitric acids which, if not dealt with, will swiftly corrode bearings and other metals in an engine's internal surfaces and destroy it.

Oil formulators include additives that are specifically designed to neutralise the acids before they can corrode the engine. Typically these include calcium and magnesium overbased sulphonates. Base number is a measurement of the quantity of these additives and is expressed in the units of mg potassium hydroxide required to neutralise 1g of oil, or more conveniently, mg KOH/g. New engine oils have a wide range of starting base numbers from around 6 to over 70 depending on the application. Once a base number drops below a critical value, it is time to change the oil as the protection against acids is now not sufficient to offer the required levels of neutralisation.

Base number (BN) is classically determined by titration. These methods have been well

described in internationally-accepted test methods such as ASTM D2896 and ASTM D4739. Titrations are time-consuming and have moderate to significant environmental impact. As a result, labs which perform a titration on all engine samples must pass this cost on to the customer, and the large additional workload slows down the turnaround time of the sample. Therefore, even though titrations are highly accurate, many labs have adopted alternative technology to obtain base numbers. Heading up this new generation of techniques is FTIR, Fourier Transform Infrared spectroscopy.

Advantages of FTIR

The FTIR spectrum contains information regarding the molecules present in the oil and, using advanced mathematical models, the base number can be predicted. The advantages of FTIR are that most commercial oil analysis laboratories already perform an FTIR analysis on engine samples, so obtaining the base number requires no more additional lab work. Thus there is no extra consumable cost, nor is there a slowing down of samples in the laboratory. As in most things, there is a big 'BUT'. The accuracy of the results is dependent on the validity of the mathematical model and the presence of water and excessive soot in the sample.

Developing models

Models are typically produced using a data set of oils where the actual titration has been accurately performed, and the FTIR spectrum collected. This data is loaded into software which then generates the model. A number of parameters then need to be set to produce a satisfactory model. Hundreds of samples would typically be needed for a lab analysing samples from a diverse range of new oils and equipment. The model works well for samples that are representative of the initial learning set, but performs poorly

for oils having a different additive package from the norm. Likewise, water and soot tend to significantly compromise the data integrity in the FTIR spectrum, and the model then produces significantly inaccurate data. For a model to work well, it should be developed with the same types of oils as used by customers. Developing these models is costly and requires highly-skilled and experienced chemists. Consequently, inappropriate models are sometimes used by laboratories resulting in spurious results.

WearCheck uses both technologies. The company recognises the significant value to cost savings and turnaround time that FTIR brings, as well as the confidence-inspiring robustness of titration. Recently WearCheck invested in excess of R300 000 in a fully-automated titration system and did significant method development, to create a benchmark system which uses more environmentally-friendly solvents while producing results which are highly accurate and repeatable. Uncertainty is measured at 5.7 %, which is a significant improvement over ASTM D4739 (10.4%), on which the method is based. Using this improved accuracy, WearCheck has upgraded the existing FTIR models, resulting in models which are locally relevant and include the latest additive technologies for the best available predictions. Should a predicted BN be lower than ideal, the fully integrated LIMS system automatically requests a titration to be performed for additional confirmation, to ensure diagnosis is entirely correct.

Conclusion

WearCheck's use of FTIR and actual titrations combined with the latest technology, fully-integrated LIMS systems and fine-tuned methods, puts our customers ahead of the competition, ensuring accurate, cost-effective and fast results.



WEARCHECK HUNGARY HOSTS IWCG

Members of the International WearCheck Group (IWCG) convene annually in a different member country to brainstorm the latest technological innovations, meet with international suppliers, share ideas and to keep the all-important business network thriving. This year, the group got together in Budapest, Hungary in July.

Pictured here are IWCG members who attended the recent gathering, from left to right: Judit Bereczki (Hungary), Neil Robinson (South Africa), Gwynn Simmonds (UK); middle: Akos Nemesnyik (Hungary), Tari Zsolt (Hungary), Jon Fazenbaker (USA), Bill Quesnel Snr (Canada) and back: Alastair Geach (Canada), Jesus Terradillos (Spain), Andre Verlinden (Belgium), Bart Coen (Belgium) and Ken Hill (USA)

MAKING HEADWAY

SPEEDY SERVICE



Shiven Brijlal

Shiven Brijlal has been appointed laboratory supervisor for the WSL (WearCheck Speciality Laboratory) in Gauteng, and is tasked with taking sample turnaround time to new levels, whilst maintaining WearCheck's well-known analytical accuracy. With 10 years of experience in WearCheck's laboratories, Shiven is well placed to supervise the WSL. He first joined the Pinetown branch as laboratory assistant after completing his schooling in 2001, initially as a temporary holiday job in the December, which soon became a permanent position.

Shiven's focus for the WSL lab is on maximising customer service and minimising sample turnaround time. In addition to overseeing the day-to-day operations of the WSL, Shiven is taking his interest in science further, and has completed several courses, including chemistry, physics and maths.

EXPANDING WEARCHECK'S SERVICES



Philip Schutte

Philip Schutte is WearCheck's new Reliability Solutions manager, and heads up the new condition monitoring division using specialised technologies such as vibration and thermography analysis.

Well qualified to operate in this highly specialised field, Philip brings with him 18 years' experience in the predictive maintenance industry. He played an integral role in optimising and

standardising Eskom's condition monitoring services under the auspices of Rotek Engineering. After heading up the condition monitoring services at ABB from 2000 to 2004, Philip was made operational director for CMMC (condition monitoring management consultants), which now forms part of the Aveng group. His qualifications include an electrical national diploma and a level three certification in vibration from Mobius.

Philip is excited about growing the new division, which offers a fresh dimension to WearCheck's oil analysis clients.

NEW EXPERTISE ADDED TO SALES TEAM



Phillip Croucamp

Phillip Croucamp recently joined the WearCheck team as sales and technical support consultant in Gauteng.

Phillip brings with him many years of experience in the industrial sector, including a seven year stint in Dubai in the hydraulic engineering industry.

While in Dubai, Phillip was instrumental in making the initial contact with WearCheck in South Africa, which ultimately lead to the establishment of WearCheck's branch in Dubai in partnership with a local company, for which Phillip at that time headed one of the subsidiary UAE companies.

With many sales and marketing courses under his belt and a career focused on sales, Phillip is well qualified to boost the sales of WearCheck products, and sign up new customers. His vast technical experience enables him to add value on the technical side, particularly in helping customers sort out breakdowns.

TECHNICAL EXCELLENCE



Tumelo Seobi

Tumelo Seobi is the new senior laboratory technician at WearCheck's speciality laboratory (WSL). Tumelo is responsible for ensuring that all WSL testing is carried out timeously and according to the work instructions.

Science has always been a passion for Tumelo – he completed his national diploma in analytical chemistry at the Vaal University of Technology in 2005.

After graduating, Tumelo worked as a lab analyst in the laboratories of Omnia Fertiliser, processing samples of fertiliser as well as mining explosives, both of which are analysed using similar laboratory instrumentation.

Tumelo joined WearCheck in 2008, initially as a laboratory assistant, and soon becoming a laboratory technician. As senior lab technician, Tumelo is excited about the opportunities his post brings, particularly as the workload of the WSL is set to increase with the recent ISO 17025 accreditation.

TRANSFORMING THE TRANSFORMER LAB



Ashley Mayer

Ashley Mayer is the new laboratory manager at WearCheck's Speciality Laboratory (WSL), which processes samples of transformer oils, turbine oils, fuels and heat transfer oils, and which is based at the offices of parent company Set Point in Isando.

Although new to the WSL, Ashley – who holds a degree in mechanical engineering – is by no means new to WearCheck. He first joined the team

as a lube-oil diagnostician in the Pinetown branch from 1996 – 2003. Then followed a sojourn away from WearCheck, working in the USA as a consultant in industrial lubrication, where he gained further experience in the industry.

After a planned three-year stay in the States, which stretched to six years, Ashley rejoined WearCheck in 2009, this time as a senior technical consultant in Gauteng. And now, under Ashley's expert guidance, the WSL is set to flourish even more with increased lab capacity pitched to meet growing sample quantities, as more and more customers opt to use a laboratory with proper ISO 17025 accreditation – a recent award of which WearCheck is very proud.

Ashley has exciting plans on the cards for the WSL, including refining work processes to hone service delivery, and developing new specialist testing lines.

VISIT US AT THE ELECTRA MINING EXPO



WearCheck is once again an exhibitor at the Electra Mining expo, which takes place this year from 10 – 14 September at the Nasrec Expo Centre, Johannesburg, and we invite delegates

to come along and meet the team. WearCheck's exhibition forms part of that of parent company, the Set Point Group, who will be featuring their state-of-the-art range of analytical facilities, fluid handling solutions and mining services. WearCheck can be found at the Set Point Group stand at Hall 5 Stand B22.

ST GILES AWARD FOR WEARCHECK

In celebration of the 60th birthday of the Saint Giles Association for the Handicapped in Durban recently, awards were given to companies who support the organisation. Managing director Neil Robinson (pictured here) attended the birthday celebrations, and was presented with a certificate in recognition of the 35 years that WearCheck has supported St Giles.



PICTURE TAKEN BY LAUREN BOYLE WALFORD/BEREA MAIL

OLÁ, NÓS FALAMOS PORTUGUÊS! (Hello, we speak Portuguese!)

WearCheck has always encouraged staff to develop and hone their skills base, both as a way of keeping employees stimulated and to assist with expanding the services offered by the company. One of the latest in-house courses being run is conversational Portuguese. This is already proving useful when interacting with customers in Mozambique and Angola.



WearCheck staff members are encouraged to learn new skills. Here, the Portuguese students are put through their paces by teacher Maria Victoria Pereira (centre). With her are students (front row, from left) Michelle Padayachee, Steven Lumley, Charmaine Thumbiran and Vigie Manikum; and behind them are, from left, Quinton Verster, Kay Meyrick and Ravi Chetty

HIGHLIGHT YOUR SUCCESS

If oil analysis has helped prevent a major failure or saved your company money, we would like to feature this in Monitor. Our writer will contact you for the details and will write the article for your approval. Simply email melanie@wearcheck.co.za and we will contact you.

2012 TRAINING COURSES

KWAZULU-NATAL Pinetown	NORTH WEST PROVINCE Rustenburg	GAUTENG Kempton Park
13-17 August	18-21 September	15-19 October
NetCheck One full day course Software package		NetCheck One full day course Software package
Oil Analysis 1 Two full days course Understanding oil and its analysis	Oil Analysis 1 Two full days course Understanding oil and its analysis	Oil Analysis 1 Two full days course Understanding oil and its analysis
Oil Analysis 2 One full day course Report interpretation	Oil Analysis 2 One full day course Report interpretation	Oil Analysis 2 One full day course Report interpretation
Oil Analysis 3 Half day course Management	Oil Analysis 3 Half day course Management	Oil Analysis 3 Half day course Management

COSTS

Oil Analysis One covers two full days and costs R4 392. Oil Analysis Two and the NetCheck course cover one full day each and each costs R2 196. Oil Analysis Three is a half-day course and costs R936. All courses include course material, refreshments, giveaways and certificates. Prices exclude VAT and are subject to change. For more details on course content, view Training at www.wearcheck.co.za. For bookings phone Michelle van Dyk on (011) 392-6322 or email training@wearcheck.co.za.

ON-SITE TRAINING

All courses can also be presented at the customer's premises for a minimum of seven delegates.

WearCheck also offers two more on-site courses:

- WearCheck Practical (in English or Zulu), a half day course costing R525.00 plus VAT per delegate
- WearCheck Customised – oil analysis for workshop technicians, a full day course costing R1278.00 plus VAT per delegate.

For on-site training, there may be an additional charge for the lecturer's travel and accommodation, if needed.

ARRANGE A TRAINING COURSE NEAR YOU

Training courses can also be arranged in any of the following areas:

Bloemfontein	Rustenburg
Cape Town	Steelpoort
Kimberley	
Makopane	Botswana
Middelburg	Namibia
Nelspruit	Tanzania (Mwanza)
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