

NEW ISANDO FUEL LAB IS A PLUS FOR CUSTOMERS

Fed up with fuel problems? Help is at hand. Wearcheck customers can now make use of a new diesel and petrol analysis service following the opening of a fuel analysis laboratory at the Isando offices in July.

'We have been providing a diesel analysis service for our customers for several years but this was outsourced to an external company,' said technical manager, Neil Robinson. 'We will now analyse diesel samples ourselves using our in-house services which also include petrol analysis.'

Customers will continue to buy fuel analysis kits from Wearcheck (for both petrol and diesel samples) and will now receive their reports directly from Wearcheck.

Although Wearcheck's diesel analysis service will include more tests than before, the cost will remain the same.

These include viscosity, density, distillation, flashpoint, water (by Karl Fischer), appearance, colour, IP contamination, sulphur, particulate contamination and, as an extra test, bacterial and fungal contamination. A similar range of tests is performed on petrol samples as well as an additional test for lead content.

Wearcheck chemist Greg Morse, who runs the SOS laboratory at Barloworld a short distance away, will do all the fuel analysis initially. Where possible, testing will be carried out according to the ASTM methods. It is also the intention to have the laboratory ISO 9001:2000 certified to bring it in line with the other Wearcheck laboratories.

'The fuel analysis service will benefit companies who are concerned about the quality of their diesel and petrol, from road hauliers to mining companies with bulk storage tanks,' Neil said.

'Diesel can be contaminated in a number of ways. If it stands in bulk tanks for an extended period, it will deteriorate. There is also the risk of



MEMBERSHIP MILESTONE

Wearcheck was honoured for its 25-year membership of the Durban Chamber of Commerce and Industry in April. The chamber's membership manager Jane Pillay (left) congratulates Wearcheck managing director Lesley Crawford.

dust and water ingress. Fungi and bacteria will often grow at the interface where the diesel and water mix, accelerating deterioration and leading to filter blockages.'

Illegal addition of illuminating paraffin is another risk. One of the Wearcheck tests will detect the government tracer which signals its presence.

Accidental contamination of diesel by petrol (and vice versa) is also a possibility in tankers or bulk storage tanks. Dirt and dust entry can also be a hazard, particularly if the oil has passed through the hands of several distributors.

'All of these possibilities could cause engine failure and costly downtime so the sooner the root of the problem is positively identified, the better,' Neil said. 'This is where fuel analysis can be a real cost saver.'

'We would like to encourage the oil companies to make use of our new service and assure them that all sample results will be treated with the same strict degree of confidentiality which is applied to our oil programme.'

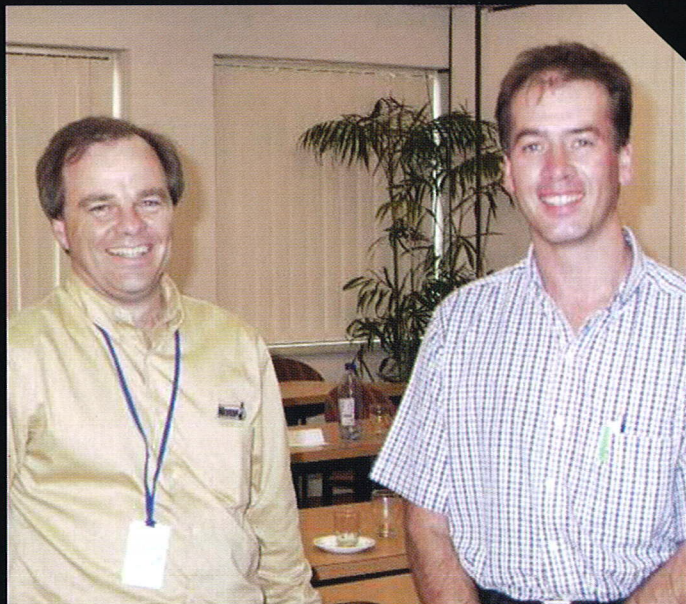


Wearcheck chemist Greg Morse will undertake diesel and petrol analysis in the new fuel laboratory in Johannesburg in future. He is pictured with the automated distillation equipment.

WEARCHECK IS A BEE SERVICE PROVIDER

Wearcheck has been accredited as an 'empowering service provider' by the SA Mining Preferential Procurement Forum through holding company, Set Point Industrial Technology.

TRAINER JAN IS ACCREDITED BY NORIA



Wearcheck's Jan Backer (right) shares a light-hearted moment with Martin Williamson, manager of Noria UK, whilst completing his accreditation as a Noria course presenter.

Wearcheck's Jan Backer has been accredited as a course presenter by the US-based Noria Corporation and will be offering their oil analysis courses in South Africa in a joint venture with the ABB School of Maintenance.

The stringent accreditation process involved attending a week-long Noria lubrication excellence seminar in Nashville, USA during March. He was then required to be a delegate at four intensive courses presented in Johannesburg over two weeks by Noria's UK manager, Martin Williamson.

These included Oil Analysis Course 1 and 2, each two days in length, followed by a two-day 'Oil analysis for engineers' course and a three-day machinery lubrication course.

'These are all high level courses aimed at senior people who have used oil analysis for some time,' says Jan.

The next step was to pass comprehensive written MLA and MLT certification examinations offered by the International Council for Machinery Lubrication (ICML) which are recognised globally. This earned Jan his accreditation and the right to present Noria's courses in South Africa for the ABB School of Maintenance.

'ABB has been Noria's agent in Africa for some years,' said Jan. 'The training joint venture is a strengthening of Wearcheck's existing alliance with ABB - offering a holistic condition monitoring service for industrial equipment encompassing vibration analysis, thermography and oil analysis.'

Jan has been a customer support consultant and technical trainer at Wearcheck for seven years. He frequently presents papers at condition monitoring conferences and lectures to post graduate mechanical engineering students.

LUBE TIP Lubricant colour

QUESTION

'We notice a different colour in the lubricants we get from our lubricant supplier in each shipment of the same product.'

Sometimes the oil is lighter-coloured, cloudy, darker, etc. Is this a problem?'

ANSWER

For Group I mineral oils, slight changes in colour or darkness often occur due to differences in crude stock. Colour bodies in mineral oils are generally associated with sulfur or aromatic impurities.

The darker the base oil the more of these impurities you generally find. Dark colour is more pronounced in higher viscosity mineral oils.

Certain additives also contribute to colour, especially those containing sulfur. For instance, detergents such as calcium sulfonate can substantially darken a finished oil. If your lubricant supplier has made a formulation change, this can lead to a corresponding colour change.

Most responsible lubricant suppliers disclose planned formulation changes to their customers in advance.

Regardless of the colour, with few exceptions, a new oil should be clear and bright. If your oil is normally clear and bright, but a new delivery reveals a cloudy appearance, this is generally a cause of concern. Reasons for this can vary, but those on the list below are common:

1. Insoluble additives (blend plant or storage stability problems)
2. Water contamination
3. Accidental cross-mixing of lubricant types where additives or base oils have clashed
4. Solid impurities
5. Low cloud point (wax crystallisation)

When in doubt, retain a sample of the oil and have it analysed.

- Courtesy of Noria Corporation

CHECK YOUR FUEL

It pays to monitor your diesel and petrol regularly. Our diesel kits (also used for petrol) consist of a 500 ml sample bottle and a submission form. They sell at R320.46 (excluding VAT) each.

Product code: WDS Diesel Kit



FLYING COLOURS

Wearcheck has passed its annual audit by the SA Civil Aviation Authority with flying colours.

The organisation renewed its approval of Wearcheck's spectrometric oil and filter analysis programme for aircraft during April.

EAST CAPE REPRESENTATIVE IS CONTRACTED

Customers in the Eastern Cape now have access to a Wearcheck representative based in Port Elizabeth who will provide a technical support and sales service in the area.

Professional engineer, Leon Marshall, who has 21 years of experience managing fleets of vehicles and construction plant for the provincial governments of the Cape, was contracted by Wearcheck in July.

As chief mechanical engineer for the Eastern Cape Department of Roads and Public Works, Leon controlled fleets of vehicles and construction equipment with a replacement value of R1000 million. His responsibilities included the purchase, maintenance, repair and disposal of the fleets as well as optimising performance to reduce costs and increase availability. He also controlled the 18 workshops and 400 mechanical staff who repaired and maintained the fleets.

The vehicle fleet consisted of cars, bakkies, buses, trucks (platform, tip, water and concrete), trailers and caravans. The construction plant fleet was made up of loaders, excavators, dozers, graders, rollers, stone crushers, generators and water pumps.

Wearcheck's oil analysis programme was part of the maintenance process from the time Leon joined the provincial government in 1978 until

he took a voluntary severance package in 1999.

'We found oil analysis was especially valuable when maintaining the older model Japanese tip trucks which were susceptible to oil sludging,' says Leon.

Leon has already started contacting Wearcheck customers by phone to discuss their operational problems and is looking forward to helping them get the most from their oil analysis programmes.

He is also able to supply all Wearcheck kits and products. He can be contacted on 082 290 6684.



Leon Marshall, Wearcheck's new representative in the Eastern Cape

CONTINENTAL TYRE REAPS THE BENEFITS OF OIL ANALYSIS

'Wearcheck gives me a glimpse inside my machines without taking them out of production which is of enormous benefit to me.'

So says Andre Myburgh, mechanical technician and head of the lube department at Continental Tyre SA in Port Elizabeth, one of the country's leading tyre manufacturers.

The company has been using Wearcheck since 1992 and has more than 240 components on the oil analysis programme. These are mainly gearboxes and hydraulic units in equipment ranging from conveyors, mixers, calenders, extruders and mills to balancing, X-ray and tyre building machines.



Andre Myburgh, Continental Tyre's mechanical technician in the factory's ISO 14001 rated oil store.

'Wearcheck is an essential part of our maintenance programme,' says Andre. 'We routinely take samples twice a year - in March and again in September so that I am fully informed on the condition of all equipment prior to our December shutdown. Problem machines are sampled on a monthly basis.'

'We go through all Wearcheck reports thoroughly and use all the information they supply to plan maintenance. This gives us greater control and saves us money on a daily basis by preventing equipment failure and

avoiding downtime on our production lines. To have a component's history available to me at the press of a button on the NetCheck system is particularly useful.'

'We could not do without this programme.'

Wearcheck's Keith Finlayson visited the tyre factory with Leon Marshall, Wearcheck's new PE representative recently. Both men were extremely impressed with the way they were using the Wearcheck programme.

Says Keith, 'They are doing everything right as far as oil analysis is concerned and they are reaping the benefits. We were especially impressed with cleanliness standards in their oil storage facility.'

Continental filters all oil before use, even if it is new, and attained ISO 14001 registration a few years ago.

'Keeping oil clean and free from contamination is a key factor in preventing component failure,' says Keith. 'This is one of the basics which is sometimes neglected. Continental Tyre is scrupulous about oil cleanliness and this is one of the things which contributes to their highly successful proactive maintenance programme.'

VISIT US AT ELECTRA

A warm invitation is extended to all customers to visit the Wearcheck stand at the Electra Mining Africa exhibition at the Nasrec Expo Centre from 6-10 September.

All Wearcheck's products and services will be on display in Hall 5, close to the big equipment manufacturers/suppliers like Barloworld, Bell and Komatsu.

We look forward to seeing you there!

WEARCHECK INTERNATIONAL MEETS IN HUNGARY



The annual meeting of the International Wearthcheck Group (WCI) in Hungary during July once again provided fertile ground for the sharing of ideas and expertise in the global oil analysis industry amongst representatives of the nine WCI member companies from four continents.

Here Wearthcheck Africa technical manager, Neil Robinson, catches up with Judit Bereckzi of the Hungarian associate company in their oil analysis laboratory near Budapest. Managing director, Lesley Crawford, also attended the conference.

MISHA IS SURVEY WINNER

Misha Marthinus (seated), sample administrator at Springbok Atlas, is the lucky winner of a weekend for two at any Protea Hotel in South Africa - the lucky draw prize offered to everyone who completed Wearthcheck's recent customer service survey.



It was actually her foreman, Tony Edwards (standing), whose name was picked in the lucky draw, but he kindly passed the

prize on to a delighted Misha who has decided to spend a weekend at Breakwater Lodge on Cape Town's V & A waterfront. Many thanks to everyone who completed the survey - the results will be featured in the next issue of Monitor.

TECHNICAL BULLETIN MAKES A SHOWING IN AMERICA

A recent issue of the Wearthcheck Technical Bulletin has been republished in the July/August issue of US-based Practicing Oil Analysis magazine. The bulletin, entitled 'How to calculate the effect oil analysis has on the bottom line' was written by John Evans, diagnostic manager: mobile equipment.

If you would prefer to receive future issues of Wearthcheck Monitor and Technical Bulletin via e-mail instead of in printed form, please e-mail a request to: support@wearcheck.co.za

Publications are welcome to reproduce articles or extracts from them providing they acknowledge Wearthcheck Africa, a member of the Set Point group.

THE LEADING OIL ANALYSIS COMPANY IN AFRICA

KWAZULU-NATAL

9 LE MANS PLACE
WESTMEAD, PINETOWN RSA
PO BOX 15108, WESTMEAD 3608
TEL :+27(31) 700 5460
FAX :+27(31) 700 5471
support@wearcheck.co.za
www.wearcheck.co.za



GAUTENG

25 SAN CROY OFFICE PARK
DIE AGORA RD, CROYDON RSA
PO BOX 284, ISANDO 1600
TEL :+27(11) 392 6322
FAX :+27(11) 392 6340
jhbsupport@wearcheck.co.za
www.wearcheck.co.za



Honeywell

