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# IF THERE'S ANY WEAR\* ANYWHERE, WE'LL TELL YOU

**SHELL ANALEXAlert**

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\*Ferrous wear

[www.shell.com/marine](http://www.shell.com/marine)



**Shell Marine Products**

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# YOUR FAST, USER-FRIENDLY SOLUTION TO ONBOARD OIL CONDITION MONITORING

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Shell ANALEXAlert is a unique, portable device that provides on board measurement and recording of metallic iron content in oils and greases, helping you identify and replace worn parts before they cause engine and equipment failure.

## **IMMEDIATE Onboard results at your fingertips**

It couldn't be easier. Simply place a sample in a standard Shell RLA bottle in the compact unit, then use the intuitive touch screen to obtain a reading in a matter of seconds.

Used regularly, Shell ANALEXAlert will give you complete sets of trend data showing levels of wear in all your critical equipment and machinery, so you can take instant action when the Shell ANALEXAlert results warn you of an imminent breakdown.

Shell ANALEXAlert also helps you plan preventative maintenance, reducing equipment downtime and increasing operational profitability.



## **Why Shell ANALEXAlert?**

- Easy to use, with a simple, intuitive, touch screen menu that provides visual trending.
- Adjustable warning limits that can be set by the user.
- Readings can be downloaded into Shell Opica or Microsoft Excel for detailed analysis.
- Portable, rugged and reliable – no moving parts.
- No calibration required – simply insert the sample bottles supplied.
- Uses the Shell RLA sample bottle – simple to dispatch to the nearest Shell RLA laboratory for further testing.
- Can be used with all types of oil and grease.

## **Shell ANALEXAlert**

The easy way to:

- Detect premature wear
- Avoid unexpected breakdowns
- Reduce equipment downtime
- Increase operational profitability

### Proven accuracy

Shell ANALEXAlert is a joint development between Shell Marine Products, a leading provider of marine fuels, lubricants and technical support services, and Kittiwake, the machinery condition monitoring and fuel and lubricant analysis company. Shell Marine Products is committed to delivering innovative technology that helps our customers lower their operational costs and improve the reliability of their on-board equipment.

By using Shell ANALEXAlert on board your ship, you will benefit from Shell Marine Product's deep technical knowledge and excellent understanding of customer needs, based on over 100 years of industry-leading experience, as well as our global network of local experts who are dedicated to providing you with the highest standard of customer service.

### Whatever the equipment

Use Shell ANALEXAlert to spot early signs of wear and tear in:

- Offshore, exploration and production equipment
- Low speed diesel engines
- Medium speed diesel engines
- Critical hydraulic systems
- Cranes
- Auxiliary engines
- Gear boxes
- Thrusters
- Pumps
- Compressors
- ...and more

### Shell ANALEXAlert gives results consistent with lab tests

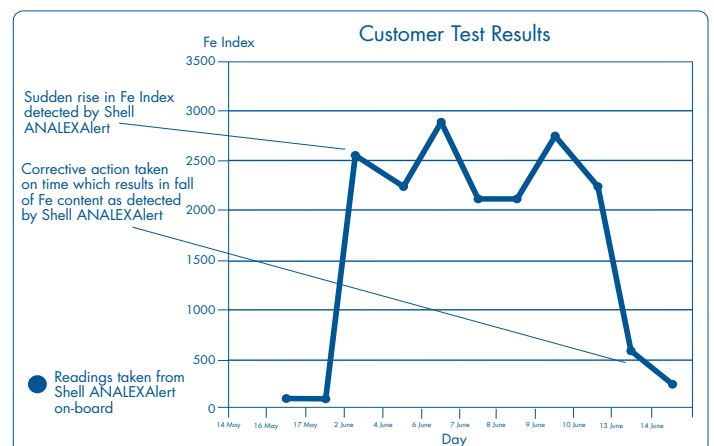
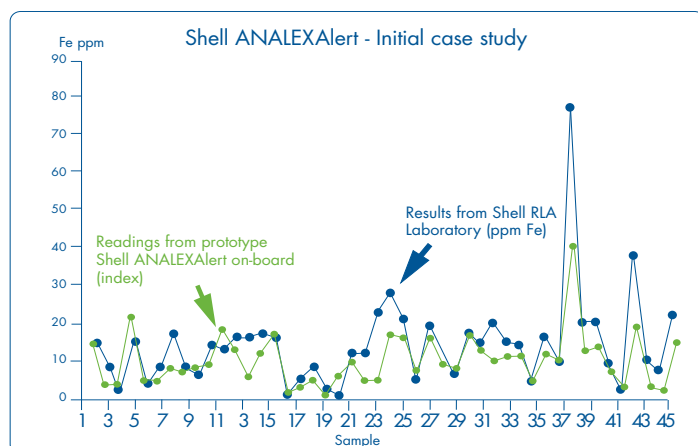
Shell has done extensive research to confirm that tests done by Shell ANALEXAlert on board ship give results consistent with tests done onshore in Shell's specialist laboratories.

### Shell ANALEXAlert could have saved Wan Hai Lines an estimated \$80,000 in downtime and maintenance costs

This container ship, with a MAN B&W K90 MC-C engine and an electronically controlled cylinder oil system was regularly using Shell ANALEXAlert and Shell RLA tests for cylinder drain oil analysis. The main engine cylinder drain oil showed an abnormal rise in iron levels in one of the units. This alerted the ship staff, and timely action was taken resulting in changing the piston rings of this unit.

Thorough investigation revealed that the vessel was using a cylinder feed rate that was well above the recommended OEM levels. The ship sailed through tropical areas with high humidity and the presence of high moisture in the air may have caused disruption in the cylinder oil film resulting in severe scuffing and abrasive wear.

Regular monitoring by Shell ANALEXAlert, a key element of Shell Cylinder Condition Monitoring, helped the ship staff to prevent further damage to the engine, including replacement of liner, downtime and maintenance costs.



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## PEACE OF MIND IN A SMALL PACKAGE

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### Created for conditions on board

With a universal power supply, Shell ANALEXAlert is robust, reliable and durable. Supplied ready for use in a protective, portable carrying case, and with a large back-lit graphics display, Shell ANALEXAlert is there to help keep your ship safe, no matter what the weather.

### Giving you confidence in all your critical machinery

With no need for calibration, Shell ANALEXAlert monitors the condition not only of cylinder drain oil, but also of oil and grease samples taken from all types of lubricated marine machinery. So you can ensure all critical pieces of equipment on board your ship – including the main engine, gear boxes, compressors and hydraulic systems – are in optimum condition, minimising repair and maintenance costs.

### Simple and easy to use

Using Shell ANALEXAlert to get an early warning about engine or equipment failure could not be simpler. Simply place a standard Shell RLA sample bottle containing the oil or grease you wish to analyse into the unit, then use the simple touch screen menu to obtain a reading.

Your results will appear within 10 seconds, displayed in ppm. You can save the reading in the unit's internal memory, with the time and date automatically linked to the sample. Shell ANALEXAlert auto zeroes between each sample, so if you want to take another reading, simply remove the sample bottle and follow the prompts.

You can set your own adjustable warning limit, so you can immediately see if the readings are indicating wear and tear that may lead to equipment or engine failure. And once you've completed a set of results, you can save the session in the unit's permanent memory as a data set, with results grouped together by equipment type. It's that easy.



### Store, view and import results

Shell ANALEXAlert allows you to store up to 90 sets of results for samples taken from the main engine, together with details of cylinder hours run, sample number, maximum cylinder pressure, exhaust temperature and lubrication feed rate. You can also store up to 500 sets of results for auxiliary equipment, together with details of cylinder hours run and sample number. Once you've completed a set of results, you can view them either as a graph or in a table format on the unit's display screen, with your warning limit clearly shown. You can also connect the unit to a PC and import the readings into a Microsoft Excel spreadsheet (or equivalent) for further examination and graphing. And because Shell ANALEXAlert can be used in conjunction with Shell RLA, you can despatch samples to a laboratory for more detailed analysis.



**For further information** please contact your Shell Marine Products representative or visit [www.shell.com/marine](http://www.shell.com/marine)