



# Fluid Management Control Systems for Auto Workshops and Industry





>>> PERMEX >>



# Fluid Management Control Systems for Auto Workshops and Industry

With ever increasing cost of oils and liquids as well as environmental concerns, management control and product traceability is essential for today’s workshop.

The Permex Oilwatch range of systems is designed to provide cost effective solutions whatever the size of the workshop or organisation. We are engineering specialists bringing you technical know how and advice.

The choice is simple: There are two versions Compact Oilwatch or Pc Oilwatch of which there are four options.

Compact is for the smaller workshop with up to eight outlets whilst Pc Oilwatch is for larger sites and multiple workshops, nationwide and cross border.

Our easy guide enables you to quickly select the system configuration you need. Whatever your needs we have the solution.

Oilwatch software is written and designed in house by Permex Ltd. Oilwatch is sold globally and branded for some leading companies.

## Why you should install Oilwatch?

You may have invested in state of the art diagnostic equipment, trained staff, hired an accountant and improved the layout but what about the all important liquids you use?

How much money or product is being lost ?

Oilwatch controls your valuable stock, and can reduce losses from unrecorded deliveries or stock losses which may be as much as 30%.

Oilwatch provides for accurate dispensing and analyses your oil usage as well as aids forecasting. Oilwatch monitors all products. Information is stored and easily accessible. Operators can be given preset and timed security access with variable management access levels.

Oilwatch provides full traceability of high value fluids and can provide indications of waste oil used.

Oilwatch comes with a comprehensive package of features which allow customers requirements to be handled using standard programmes.

The features can be made site specific .

## Why you should choose Oilwatch

- » Ease of use
- » Cost saving
- » Anti-theft
- » Simultaneous dispensing
- » Flow rates up to 700 l/min
- » Suitable for most fluids not just oils
- » Up to 5,000 individual users
- » Intelligent add-ons
- » Large buttons for quick input
- » Bar code reader
- » Monitor from 1 to 200,000 outlets
- » Inventory reconciliation of new and waste fluids
- » Full audit trail
- » Planning and usage analysis
- » Computer initiated dispensing
- » Environmental protection
- » Suitable for mobile service units
- » Suitable for industry as a filling system

## Applications: Areas of use

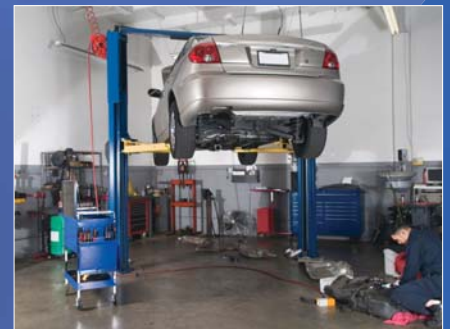
- » Car & Truck Dealers
- » Fleet Maintenance Workshops
- » Construction Sites
- » Heavy Equipment
- » Oil & Chemical Industry
- » Municipal Garages
- » Airports Maintenance Shop
- » Mining Industry
- » Shipping Industry
- » General Industry
- » Quick Lubes
- » Councils
- » Military

## Compact Oilwatch

# Compact Oilwatch for the Smaller Auto Wor



Compact Oilwatch Control Keypad



### FLEXIBILITY

Compact Oilwatch makes oil monitoring feasible and affordable without the need for large investments.

### CONTROL

Compact Oilwatch has a single control unit which can monitor up to eight different outlets. The user can dispense simultaneously from any one of the outlets regardless of the product to be monitored. Other fluids including antifreeze and brake fluids can operate on this system. A large digital display (optional) can be installed to show volume dispensed.

Waste liquids can be theoretically calculated in up to eight tanks to give early warning that the waste oil tanks need emptying.

The Compact system displays both new and waste tank stock readings on screen. The system can be fitted with a printer to expand its reporting capability to printed hard copies, including prompt details, Date and Time, Oil grade, Reel No's, Job No's, Name of operator, Quantity, Sales value.

# Workshop or Production Line



Input Keypad



Secure Smart Tag



Barcode Reader

## EASE OF USE

For the operator the Compact Oilwatch is easy to use without the need for extensive training or manuals. To activate dispensing all the operator has to do is tap in the entry information on a simple question and answer basis. The operator is prompted at each stage before oil can be delivered. This ensures quick system usage and trouble free operation. Operators can be allowed access to a specific outlet only, should this be required.

A PC link has been designed which allows installers to programme the unit on a PC for future upload to the Compact Oilwatch.

## SYSTEM SECURITY

A secure smart tag can be added to the keypads to replace pin numbers. The tag reader is used like a lock and key and offers physical hardware access, if required.

## BARCODE DISPENSING

Barcode reading is also available on the Compact Oilwatch. On this system the manager inputs the barcode into the software prior to use. Each barcode tells the software which outlet to use and what volume to dispense.

## FEATURES

- » Pin Code security. 5000 users
- » Touch key option
- » Controls up to eight different grades of new oil and eight waste oil tanks
- » Controls up to eight outlets
- » Simultaneous dispensing of outlets
- » Setup for timed use of each outlet
- » Maximum Delivery quantity per outlet
- » Operator restriction of outlet use
- » Maximum flow rate single outlet dispensing 700 l/min using 100 ppl meter
- » Maximum flow rate multiple outlet dispensing 100 l/min using 100 ppl meter
- » Standard Flow rate multiple or single outlet dispensing 35 l/min
- » Preset dispensing
- » Simultaneous outlet dispensing
- » Display of tank volumes
- » Display of re-order level warnings
- » Tank shutdown level control
- » Free flow metering or preset quantity-metering options
- » Bar code reader/external data entry device option
- » Set up for use as industrial batching system
- » Large digital display option
- » Measuring in Litres or Gallons, Quarts and Pints
- » Stand alone or configuration through PC programming lead
- » Input of special characters
- » 1,000-transaction storage capacity
- » Connection to low tank level alarm
- » Up to four manager specified custom input prompts
- » Setup for system use without printer
- » Printing via ticket printer or any RS232 compatible printer

## Pc Oilwatch

# Pc Oilwatch for the Larger Auto Workshop



Pc Oilwatch Control Keypad and PC Software



### FLEXIBILITY

The system can operate up to 25,000 Control Keypad entry devices. A single Control Keypad can monitor up to 8 different outlets dispensing simultaneously from any one of the outlets regardless of product, ensuring expandability to even the largest of sites.

Pc Oilwatch has an easy to operate software interface offering outlet dispensing activated directly from the PC software.

The workshop Control Keypads have large buttons and display which offers easy to follow and fast data input. New input Keypads allow multiple locations to input data into the Control Keypads.

# or Production Line



## HOW PC OILWATCH WORKS?

Pc Oilwatch operates with pulse meters and solenoid valves fitted into the fluid delivery lines which control and monitor the fluid dispensing.

The volume dispensed is measured by the control keypad from a digital signal returned by the meter. Pc Oilwatch can shut down a dispense once the required volume is reached. The system time-out reduces the possibility of pilfering from an active dispense as the system will shut the dispense down after the time out period.

The dispense information is conveyed to the PC Software for correlation via an uninterruptable network link. Pc Oilwatch monitors tank levels by removing the dispensed volume from the contents of the tank.

Pc Oilwatch network cabling ensures that transaction stability and valuable data is immune to interference during operation, even if the site layout and equipment changes.

Pc Oilwatch software supports downloadable updates.

## EASE OF USE

The Pc Oilwatch has built-in dispense security using a four digit pin number. A secure smart tag or swipe card reader can be added to the keypads to replace pin numbers.

The tag or card is used with its reader like a lock and key to offer physical hardware access should users require them. Pin numbers can also be assigned to individual keypad access for enhanced security.

Pc Oilwatch has up to four optional prompt requesters available. These are normally set to request Job numbers or licence plate input by the technicians directly through the alpha numeric keypad. The control keypad can be fitted with a barcode reader to enable prompted data to be read into the system as an alternative to direct operator input.

New fluid dispensing can be authorised by outlet for each operator. Outlets can also be given operating time periods to ensure they are secure when not in use. Other fluids including Antifreeze, Grease, AdBlue (DEF) and Brake fluid can be monitored controlling up to 50 new product tanks.

Waste product can also be calculated and added to waste tanks providing site owners early warning that their waste oil tanks need emptying. Large digital displays can be installed to show volume dispensed if required.

The system can be fitted with a printer to give transaction reports after each dispense. The print out shows:- prompt details, Date and Time, Oil grade, Reel No, Job No. Name of operator, Quantity, Sales.

The database can reside on a local Pc or on a Windows server with multiple LAN (local area network) connected Pc's able to view the database.

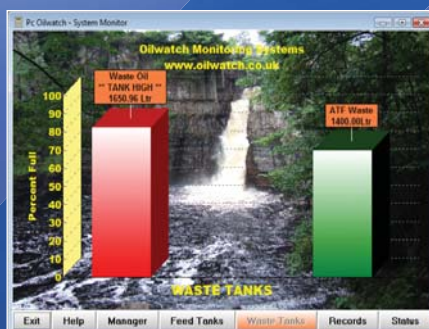
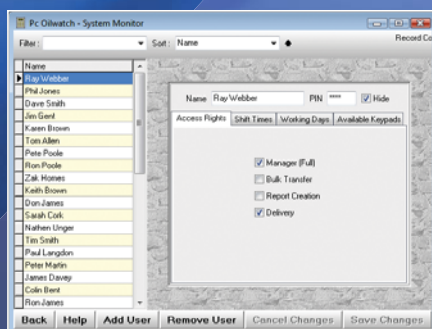
Oilwatch will monitor flow rates up to 100 l/min with multiple outlet dispensing. Alternatively single outlet dispensing up to 700 l/min per keypad.

Pc Oilwatch software allows control of the Keypad configuration when an isolated Keypad returns to the network. This allows Keypads to be mounted on mobile service vehicles. Transaction information is downloaded when the vehicle return to refill its tanks.

The system is designed to be easily used and provide you with an overall view of the business. For users operating multiple sites software is available to view individual site stock on-line.

# Pc Oilwatch

## Software Features



Date	Grade	Quans	Units	Sale Price	Cost Price
11/12/2009 12:25:00	Engine Oil	0.00	Ltr	1.71	1.53
11/12/2009 14:48:00	Antifreeze	0.00	Ltr	2.57	1.87
11/12/2009 14:48:00	Engine Oil	4.49	Ltr	1.71	1.2
11/12/2009 14:48:00	Gear Oil	3.60	Ltr	2.19	1.53
11/12/2009 14:49:00	Hydraulic Oil	0.00	Ltr	1.64	1.15
11/12/2009 14:49:00	Engine Oil	4.49	Ltr	1.71	1.2
11/12/2009 14:49:00	Gear Oil	3.00	Ltr	2.19	1.53
11/12/2009 14:49:00	Engine Oil	4.49	Ltr	1.71	1.2
11/12/2009 14:51:00	Engine Oil	9.49	Ltr	1.71	1.2
11/12/2009 14:51:00	Antifreeze	0.00	Ltr	2.57	1.87
11/12/2009 14:53:00	Engine Oil	9.49	Ltr	1.71	1.2
11/12/2009 14:53:00	Hydraulic Oil	0.00	Ltr	1.64	1.15

### ACCESS RIGHTS

Oilwatch systems have four levels of Access rights built into the software. Each of the 5000 available users can be assigned access as required for full access as a Manager, Reporting, Bulk Transfer & Dispensing.

Pin no's can be assigned working hours, days and keypads to assure the manager that the system is only available to the users when they are working.

These options have been designed into the system as standard features to provide managers with the flexibility to run the business without being on site all of the time.

### NETWORKING

Pc Oilwatch comes with two database options. The standard single-use version uses a Microsoft access database. For other options the system can be hosted on Microsoft SQL server to make backups easy for administrators. The SQL also offers advance software that will allow the Pc Oilwatch to run as a viewer program on networked PC's. It also allows multiple systems to be joined into a single database.

### DATA EXCHANGE

Third party software is able to interface with Pc Oilwatch using either DDE, XML messaging or two way ASCII file link.

The software has been written to allow the Pc Oilwatch software to receive data from other applications e.g. Job Numbers, Licence Numbers, fleet Numbers. This information is stored within Pc Oilwatch to allow operator inputs to be validated.

The software also allows other applications access to transaction information for use within their systems.

### VALIDATION CODES

Pc Oilwatch can use validation codes for each of the four user prompt inputs. "Prompt replies" can be given a maximum number of attempts with limited grade and volume usage.

### REPORTS

Pc Oilwatch is supplied with a two part reports package, standard or advanced.

#### Standard

Standard reports for tank contents, product usage, operator usage and audit trail can be obtained under the report menu.

#### Advanced

Advanced reports, transaction information can be correlated using the built in fully flexible reports generator as defined by the users.

The reporting package allows the user to design a transaction report to suit the unique requirements of the business by simply picking the information and layout required for the report.

The report can be given a title. Further options are available to allow the user to include totals, create a report summary layout or to break the page. Normal print and font options allow for easy use of this valuable reporting tool.

The reports are easy to use and quickly take the user through the set-up procedure. The report structure can even be saved to allow fast re-use.

FEATURES

- » Easy to use for managers & operators
- » Extensive features as standard
- » Full audit trail
- » Reports – Manager modifiable transaction reports also tank List, product usage and operator usage
- » Expandable from 1 to 200,000 outlets
- » Preset dispensing
- » Simultaneous outlet dispensing
- » Four levels of access rights from manager to operator
- » Operator access by PIN, barcode, I-button, swipe card or combination
- » 5,000 users
- » Operator restrictions optional e.g. timed outlet use, designated keypad use, working days
- » Can prompt for user input e.g. registration no, order no, job no
- » Can monitor most fluids not just oil
- » System Accuracy +/- 0.01 litres
- » Controllers located away from damage prone area
- » High visibility 50 mm tall digital displays available
- » Mobile dispensing can be monitored e.g. mobile lube truck
- » Each keypad can store 1,000 transactions
- » Keypads can work independently
- » Keypads can be independently updated
- » Dispensing can be initiated directly from a computer
- » Graphical display of tank volumes shows percentage full
- » Low fresh product tank level alarm
- » High waste product tank level alarm
- » Calculated waste tank levels as standard
- » Measuring in Litres, Gallons, Quarts and Pints or by weight i.e. Kg or lbs. The tank can be given a multiplier to allow the tank to show a different unit of measure
- » Warning printouts of invalid use attempt
- » Future proof – software upgrades available from [www.oilwatch.co.uk/support](http://www.oilwatch.co.uk/support)
- » Open access software interface to connect with other programmes
- » Free telephone support

Four easy steps to creating a report.



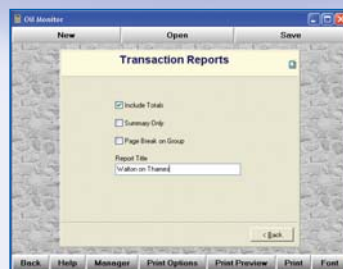
Step 1 Select: Report Headings



Step 2 Select: Report Groups



Step 3 Select: Report Filters



Step 4 Select: Report Options

Date	Outlet	Prompt1	Prompt2	Operator	Quantity	Uom	Selling Price
15/12/2008 17:08:00	0			Nathan Unger	-1.00	Ltr	€0.00
15/12/2008 17:08:00	0			Ray Webber	-1.00	Ltr	€0.00
15/12/2008 17:08:00	0			Ray Webber	-1.00	Ltr	€0.00
15/12/2008 17:08:00	0			Ray Webber	-1.00	Ltr	€0.00
15/12/2008 17:08:00	0			Nathan Unger	-1.00	Ltr	€0.00
15/12/2008 17:22:00	0			Ray Webber	-1.00	Ltr	€0.00
15/12/2008 17:22:00	0			Nathan Unger	-1.00	Ltr	€0.00
15/12/2008 17:22:00	0			Ray Webber	-1.00	Ltr	€0.00
15/12/2008 17:24:00	0			Ray Webber	-1.00	Ltr	€0.00
9 Transaction(s) for [Grade = <All>] =>							-Total: 9.00
Grade = Antifreeze							
21/12/2008 13:34:00	8	A5500	A300RLW	Ray Webber	4.20	Ltr	€2.67
21/12/2008 13:37:00	8	A5500	A300RLW	Ray Webber	4.20	Ltr	€2.67
2 Transaction(s) for [Grade = Antifreeze]							Total: 8.40
Grade = Engine Oil							
21/12/2008 13:31:00	8	A5501	W33ANKJ	Ray Webber	4.49	Ltr	€1.71
21/12/2008 13:31:00	9	A1546	M801MYD	Ray Webber	4.49	Ltr	€1.71
21/12/2008 15:41:00	9	M3253	RS2PC	Phil Jones	6.11	Ltr	€1.71
21/12/2008 15:46:00	5	A5428	A78RJW	Ray Webber	4.49	Ltr	€1.71
4 Transaction(s) for [Grade = Engine Oil]							Total: 19.58
Grade = Gear Oil							
21/12/2008 13:32:00	2	A1546	M801MYD	Ray Webber	3.24	Ltr	€2.19
21/12/2008 13:34:00	6	A5500	A300RLW	Ray Webber	6.40	Ltr	€2.19
21/12/2008 13:37:00	6	A5500	A300RLW	Ray Webber	6.40	Ltr	€2.19
21/12/2008 15:42:00	10	G21452	DS6JMG	Dave Smith	3.60	Ltr	€2.19
4 Transaction(s) for [Grade = Gear Oil]							Total: 19.64
Grade = Hydraulic Oil							

Final Report

# Oilwatch

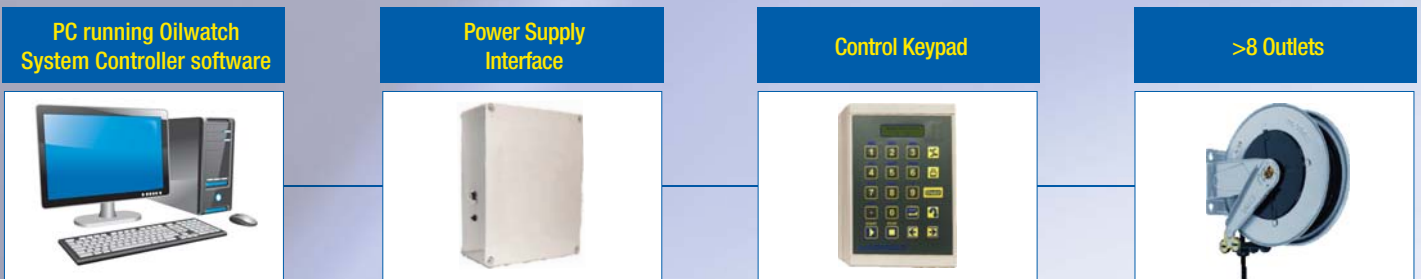
## Oilwatch Options - Selector

### Compact Oilwatch

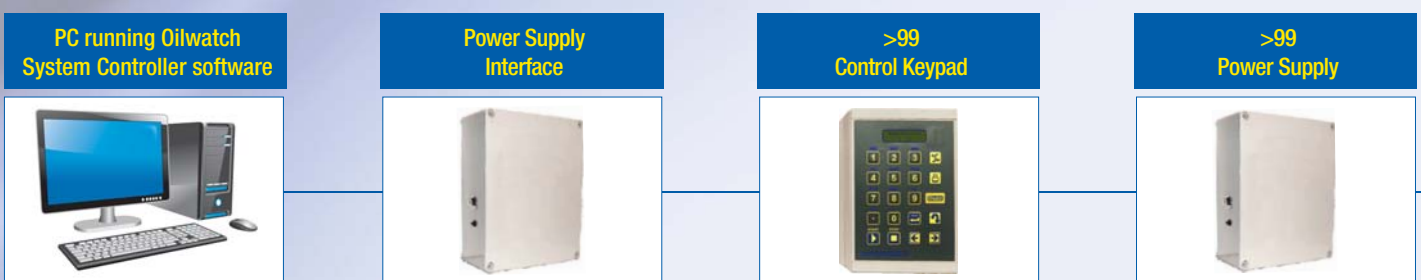


### Pc Oilwatch

#### Option 1



#### Option 2





### Calculator

Oilwatch System Options						Add on's									
	Compact	Control Keypad	Power Pc Supply	Interface Power Supply	Outlets	Solenoid Valves*	Meters*	Input Keypad	Digital Display	Ticket Printer	Smart Tag	Barcode Reader	Card Reader	Fibre Optic Interface Modem	Fibre Optic Keypad Modem
Compact System	1	0	1	0	>8	>8	>8	>8	>6	1	>5000	1	1	0	0
Pc Oilwatch															
Option 1	0	1	>1	1	>8	>8	>8	>8	>6	1	>5000	>1	>1	>1	>1
Option 2	0	99	>99	1	>792	>792	>792	>792	>594	1	>5000	>99	>99	>1	>99
Option3	0	>99	>99	1	>792	>792	>792	>792	>594	1	>5000	>99	>99	>1	>99
Option 4	0	>24750	>24750	>250	>198000	>198000	>198000	>198000	>148500	>250	>5000	>24750	>24750	>250	>24750

Key: > = up to in the table. \*1 per outlet. See page 12 for add on's.

The option boxes' above show the maximum quantities for each of the Oilwatch system options.

Example: If there were twenty four outlets = 4 per bank you will need 6 Control Keypads. Then add Solenoid Valves and Meters; ie 24 of each. Then add your other options.

### Table to note your requirements

Oilwatch System Options						Add on's									
	Compact	Control Keypad	Power Pc Supply	Interface Power Supply	Outlets	Solenoid Valves*	Meters*	Input Keypad	Digital Display	Ticket Printer	Smart Tag	Barcode Reader	Card Reader	Fibre Optic Interface Modem	Fibre Optic Keypad Modem
Compact System	1		1	0											
Pc Oilwatch															
Option 1	0			1											
Option 2	0	6	6	1	24	24	24								
Option3	0			1											
Option 4	0														

Check how many outlets are on site.

A Control Keypad can monitor up to eight outlets. Input Keypads can be added to Control Keypads to allow an input device to be mounted at the point of dispense if required. Using Input Keypads reduces keypad costs.

Each outlet requires a meter and solenoid valve to operate. Meters and solenoid valves must be specified for the fluid used.

A single power supply gives enough power to run up to eight outlets.

Decide if you wish to use add on items. Smart Tag readers can be fitted to Control Keypads as standard. Simply decide how many tags you require, one for each controller.

>792 Outlets



# Oilwatch

## Oilwatch Options

### Pc Oilwatch

#### Option 3

PC running Pc Oilwatch controller software.

PC running Oilwatch System Controller software



Power Supply Interface



>99 Control Keypad



PC running Oilwatch software requires Microsoft SQL Server > 250 Networked PC's



#### Option 4

PC running Oilwatch Controller software requires Microsoft SQL Server > 250 Networked PC's

PC running Oilwatch System Controller software



>250 Power Supply Interface



>99 Control Keypad



PC running Oilwatch System Controller software



>250 Power Supply Interface



>99 Control Keypad





Add on's

>99  
Power Supply

>792  
Outlets



Solenoid Valves\*



Meters\*



Input Keypad



Digital Display

>99  
Power Supply

>792  
Outlets



Ticket Printer



Smart Tag

>99  
Power Supply

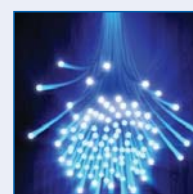
>792  
Outlets



Barcode Reader



Card Reader



Fibre Optic Interface and Keypad Modem



# The home of Oilwatch

**Oilwatch** is designed and manufactured by Permex Ltd. The company was established in 1962 and is based in Hoddesdon, Hertfordshire approximately 20 miles north of London. We are an engineering company registered to ISO 9001 and specialise in electronic monitoring systems, garage workshop lubrication equipment, and equipment for the petroleum and chemical industries.

The Oilwatch oil-monitoring system is a state of the art system and an essential management tool to control oil usage in an auto workshop environment. This versatile system is also useful for controlling other liquids too in a variety of industries. The software programs are designed and written in-house by our own dedicated IT team.

From its concept stage in the early 90's Oilwatch systems are in use in workshops throughout the UK, Europe, Africa, the Middle and Far East and also in the USA and South America. Our product is also branded for some leading equipment companies.

We provide comprehensive product support and can also assist with training and installation wherever you are. To become a Permex Oilwatch distributor or to purchase our equipment please contact us.

For more information visit our web site at: **[www.oilwatch.co.uk](http://www.oilwatch.co.uk)**  
call **+44 (0)1992 452960** or email **[lubesales@permex.co.uk](mailto:lubesales@permex.co.uk)**



Permex Ltd  
Riverside House  
Plumpton Road  
Hoddesdon  
Hertfordshire  
EN11 0PA  
United Kingdom 

Office +44 (0) 1992 452 960  
Mobile +44 (0) 7774 600 642  
Fax +44 (0) 1992 452 911  
Email [lubesales@permex.co.uk](mailto:lubesales@permex.co.uk)

[www.oilwatch.co.uk](http://www.oilwatch.co.uk)