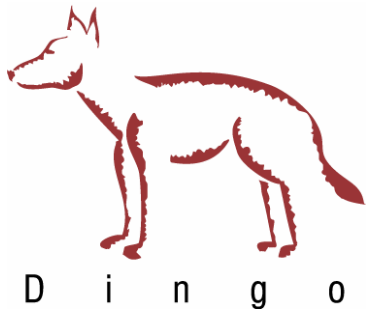


PROGRAM OVERVIEW

In this overview ...


ConocoPhillips



MAINTENANCEGUY OIL ANALYSIS PROGRAM

- 
- Introduction
 - The three “C”s
 - Data Management and Analysis Software
 - Sample Kits
 - Laboratories
 - Technical Support
 - Training
 - Test Packages
 - Support
 - Engineering Services
 - System Requirements

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MaintenanceGuy Oil Analysis System Overview

INTRODUCTION

The MaintenanceGuy Oil Analysis Program is an all-inclusive condition monitoring program for lubricated components. Included in the sample price is everything you need to save money through the use of oil analysis:

- Sample kits for collecting samples
- Laboratory testing – at the lab of your choice
- Web based software for organizing and analyzing your data

Asset intensive organizations will benefit from faster, wider access to better decision making data.

Customizable for individual clients, MaintenanceGuy, will allow Maintenance Staff from around the globe to make decisions based on all of their corporate Maintenance data with real-time input from Consultants, OEM's and Suppliers connected to the internet.

The MaintenanceGuy Oil Analysis Program requires minimal setup and is easy to use:

- An end to end solution for oil analysis
- Enables faster detection of trends and detection of potential equipment failures
- Enables global access to machine information
- Provides an information hub for skills development
- Provides powerful management data for decisions and negotiations

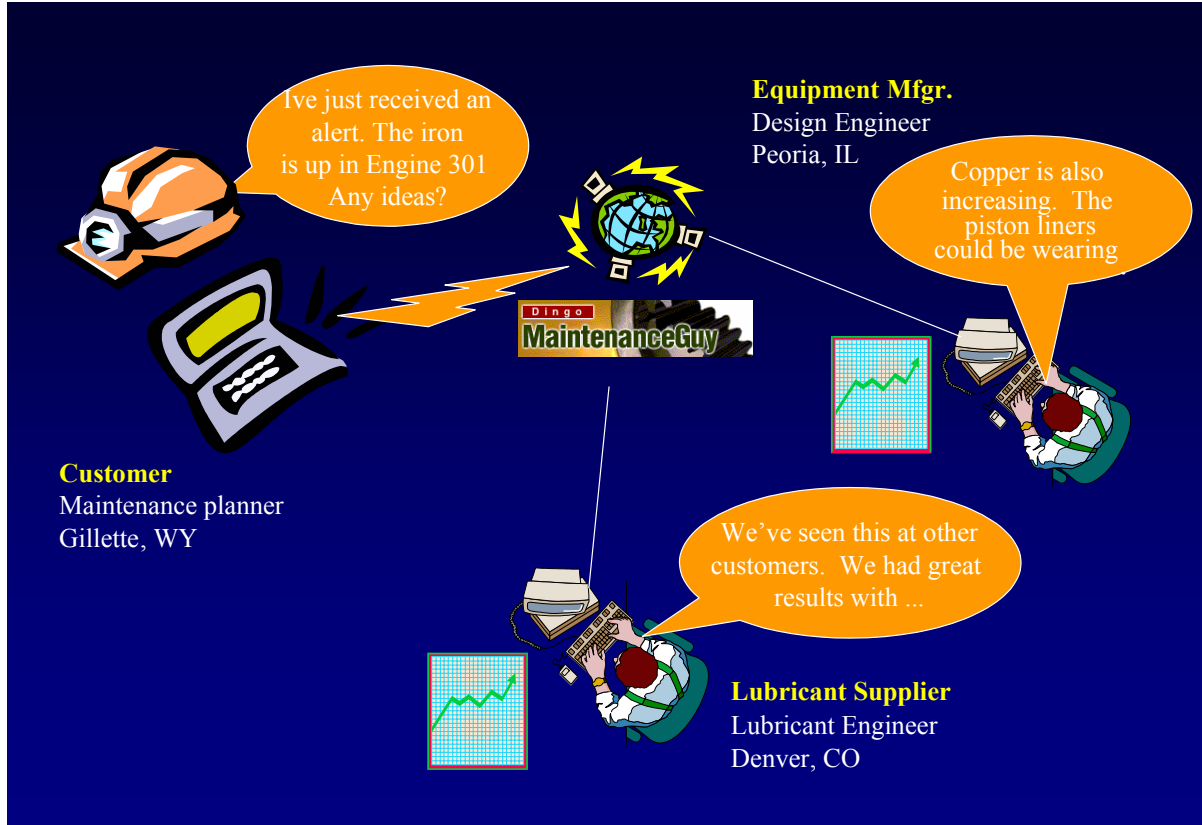


System Features

- **Software.** Your sample price includes Dingo's ground breaking, user-friendly MaintenanceGuy software. Get your data fast and make decisions to drive your maintenance costs lower.
- **Testing.** Choose from six specially designed test packages. Select the lab you want to use from our growing list of member labs.
- **Sample Kits** – World class sample kits, shipped direct to your site ensure consistency and repeatability of your data.
- **Support** – this program is supported by Dingo, a company who has specialized in oil analysis since 1991, with customers on all continents.
- **ConocoPhillips** – the program is backed by ConocoPhillips, a global Energy company Headquartered in Houston, Texas, operating in 49 countries. The company has approximately 56,000 employees worldwide and assets of \$75 billion

THE THREE C's

The internet means that for the first time, you can work on maintenance problems with anyone, anywhere. Collaborate in real time to get to the right decision faster. Form quick virtual teams to solve problems quickly. Share information with sister sites and learn from others. The need for faxes, filing or mailing reports is eliminated.



Features

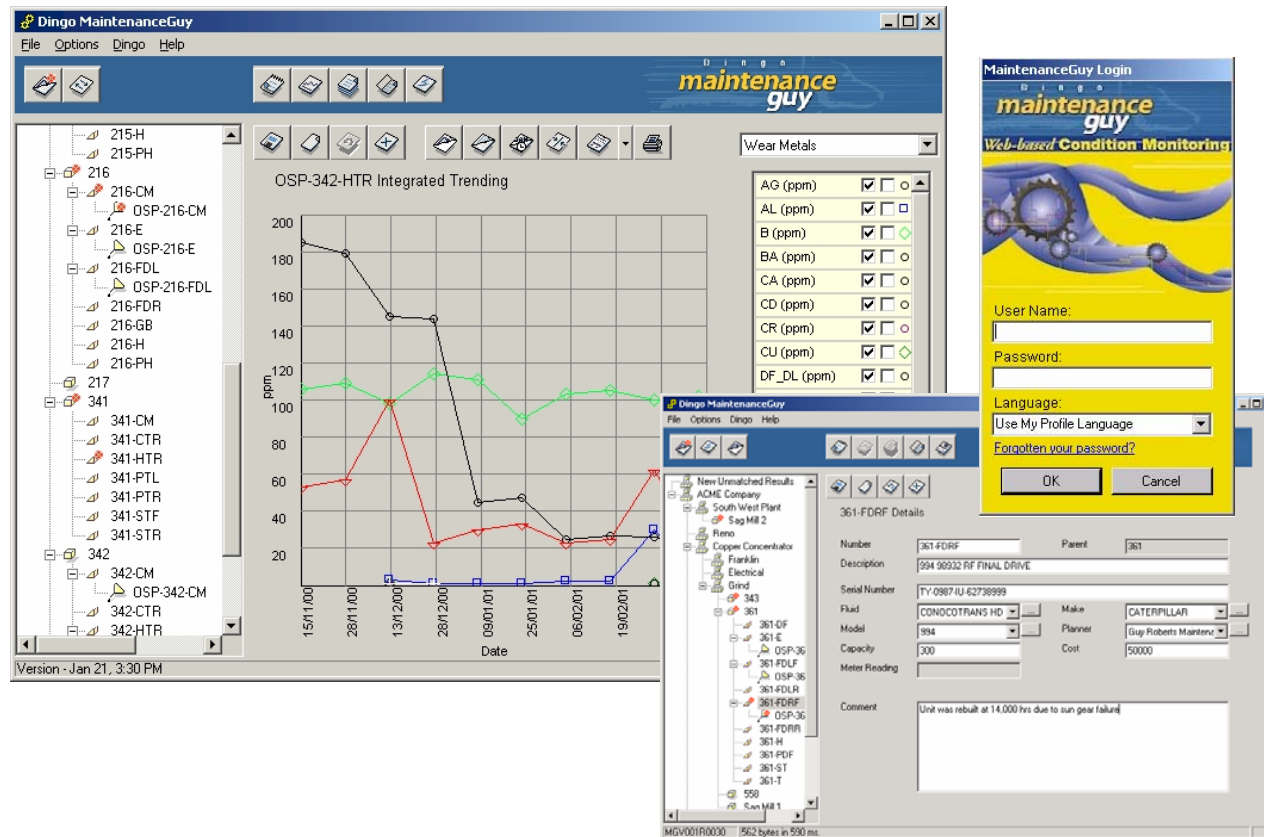
Collaboration – Tap into the resources of knowledgeable suppliers, OEM's and consultants. You always have access to the latest data. – get access to your data from wherever you can access the internet.

Content – Convert raw data to information to knowledge and to business results, by enabling people to add maximum value at each step. Site Maintenance Planners, Corporate Engineers, and Management can all contribute to a better maintenance business decision. Share case studies and multiply the benefits of a success across the organization.

Consolidation – Consolidate all types of condition monitoring data in one robust central database. Each site can access its own data, and compare that with data from other parts of the organization worldwide.

DATA MANAGEMENT & ANALYSIS SOFTWARE

The heart of the MaintenanceGuy Oil Analysis Program is our web based data management software. From anywhere, anytime, with one user-friendly software application, you can access your entire history, view trends, print reports and make decisions. E-mail notifications tell you the second you have new information on your equipment.



Features

Web based - a full featured interactive software package delivered through the internet.

Graphical Asset Hierarchy – provides quick visual access to equipment and sample points.

Trend Graphs – trend Elemental measures (metals), Particulate contamination, Oil physical and chemical properties – even define your own views. Zoom in by dragging an area.

Graph Palette – Quickly and easily change line colours, test trended. Plot against left or right axis or both to aid in analysis.

Unit Hours or Date – Use machine hours or dates on X-axis. Missing samples can also be easily seen.

History Database – Maintain all oil analysis historical data in one convenient database.

Lab Alarms – results which are flagged as being in alarm condition by the lab are highlighted in yellow (moderate) and red (extreme).

DATA MANAGEMENT & ANALYSIS SOFTWARE (CONT..)

Our software puts all of your oil analysis data at your fingertips, displayed in a way that makes it easier to see whats going on inside your equipment. Productivity tools like sample label printing mean you spend more time analyzing the data than collecting it.

The screenshot displays the Dingo MaintenanceGuy software interface. On the left is a tree view of equipment including ACME Company, South West Plant, Reno, Copper Concentrator, Franklin, Electrical, Grind, 343, 361, 361-DF, 361-E, OSP-361-E, 361-FDLF, OSP-361-F, 361-FDLR, OSP-361-F, 361-FDRF, 361-FDRR, 361-H, 361-PDF, 361-ST, 361-T, 558, Sag Mill 1, Las Vegas Eq Yard, Mine, Sarpy Creek, Tonoapah, and Wharf Gold. The main window shows the 'OSP-361-FDRF History' table with columns for Status, Sample Date, Meter Reading, and various chemical elements (ZN, TI, V, WATER, SI, SN, ST, NI, P71, PB, MN, MD, NA, GLY, K, MG, CU, FE, FP, BA, CA7). A detailed report for 'OSP-361-FDRF' is shown below the table, including equipment details, report date, and a 'Wear Metals' graph. The graph plots various elements (Ti, Lead, Copper, Iron, Barium, Chromium, Aluminum) against dates from 11/30/00 to 4/13/01.

Status	Sample Date	Meter Reading	ZN71	TI	V	WATER	SI	SN	ST	NI	P71	PB	MN	MD	NA	GLY	K	MG	CU	FE	FP	BA	CA7
	4/13/01	45493	1236	0	0	0.1	4	0	0	1131	12	0	1	10	0	11	56	4	2	3002			
	3/28/01	45225	1293	0	0	0.1	4	0	0	1124	0	0	0	13	0	11	3	3	0	3071			
	3/15/01	45012	1367	0	0	0.1	8	0	0	1185	0	0	0	3	0	13	0	2	0	3324			
	2/28/01	44814	1313	0	0	0.1	5	0	0	1117	0	0	0	10	0	13	2	4	0	3174			
	2/15/01	44613	1210	0	0	0.1	3	0	0	1092	0	0	0	10	0	9	2	1	0	3023			
	2/1/01	44384	1292	0	0	0.1	3	1	0	1085	3	0	1	15	0	10	28	5	0	2957			
	1/18/01	44178	1307	0	0	0.1	4	1	0	1124	6	0	1	18	0	11	30	9	0	3044			
	1/4/01	44031	1314	0	0	0.1	5	0	0	1107	5	0	0	20	0	14	32	11	0	3072			
	12/20/00	43809	1328	0	0	0.1	5	0	0	1134	7	0	0	21	0	15	33	11	0	3178			
	11/30/00	43475	1357	0	0	0.1	4	0	0	1125	4	0	0	9	0	13	29	8	0	2832			

Features

Print Sample Labels – Save time and reduce errors by printing sample labels. No more hand writing. The lab gets all the information it needs every time.

Advanced Oil History Report – this customisable report includes your selections and comments. Export to Word, Acrobat or Excel.

Edit on screen – Manually add samples and notes to history or edit results with errors. View graphs with changes before committing the changes to history.

Equipment Database – keep details of the equipment or sample points which are tested – Description, make, model, serial number, cost and person responsible.

Sample Point data – store lubricant test information including sample interval, oil change interval, the last sample and oil change dates

Lubricant Data – store lubricant information including lubricant type, the amount of lubricant in the machine, the supplier and grade.

SAMPLE KITS

Dingo has designed and built a test package kit that represents best practice in the industry. These kits work perfectly with our program and are shipped to you direct. This ensures quick and easy ordering and testing by your lab. You receive e-mail notification of the shipping status of your order.



Features

Labels – Bright, clear labels indicate to you and the lab, the tests to be performed and the test methods to be used. UPC Barcode on lid can be used for inventory control.

Industrial and Engine tests – clearly indicates which bottles should be used for what equipment.

Clean, Clear bottles – Enables you to do quick visual inspection at the time of sample to see some problems right away. Heat resistant for live sampling.

Fill Line – Ensures that technicians get enough oil for all tests. Avoids overflow and possible contamination.

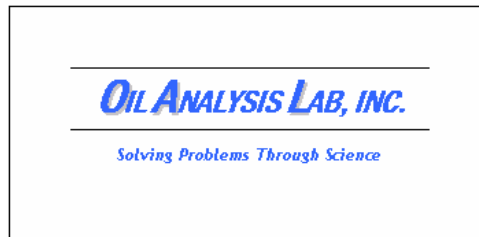
Shipping box – Re-usable shipping box safely transports your kits to you and then to the lab. Saves money and time. Convenient 10 pack size to carry.

Other hardware – Spare testing bottles, compatible sample ports, pumps, tubing and needle-point sample valves are available. Sample ports are labelled with MaintenanceGuy ID tags to make location easy.

LABORATORIES

Because Dingo does not own or operate testing laboratories, we have designed the program to work with a global network of certified independent testing labs. This means that you can choose the lab or labs that are right for your equipment and locations. Our certification program means that labs in the program have been checked for quality and meet our strict requirements for producing quality results.

CTC
Analytical Services



Features

Choice of Labs – Select from a growing list of certified laboratories worldwide. This means faster turn around time, and flexibility should you ever need to change labs. Refer to www.dingo.com/labs for a current list of labs in the MaintenanceGuy member labs.

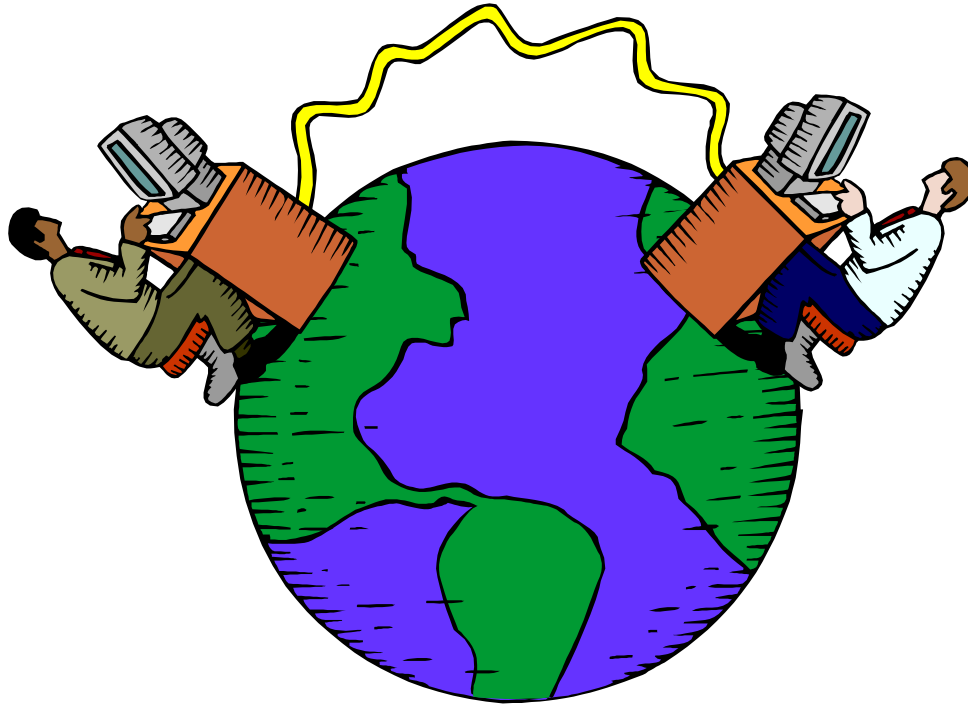
Certification Program – Our engineers certify each lab in the network. This ensures consistent testing whatever lab you choose.

Industry Specialists – Some of our member laboratories have been certified to have special expertise in equipment for specific industries like mining, gas gathering, gas transmission, power generation, fleets. See our website for more information.

On site labs – If you use an on-site lab, you can order sample kits, do your own testing and send the results to MaintenanceGuy software. Particle counters and other portable equipment can also be integrated.

TECHNICAL SUPPORT

To get you up and running and to keep you there, Dingo's technical support team is just a phone call away. We operate support centers in Brisbane, Australia and Denver, USA. We track support in a single integrated database.



Features

Technical Support – included in your sample price is access to our technical support centres in Denver USA and Brisbane Australia.

Global support - This means answers to your questions are a phone call away fifteen hours out of each business day.

Flexible - Support for all users at your site is available by phone e-mail or fax. A feedback form is included with the software.

Web Support – answers to our most frequently asked questions are compiled and posted to our website on www.dingo.com/FAQ

Downloads – popular file downloads are also located on our website.

TRAINING

Dingo has been providing training to Maintenance people around the world for over a decade. Correct training will give your people the confidence to use the system to make good decisions. Our training programs and tools get you up to speed quickly with what you need,



Features

Experience – Dingo has been providing training on oil analysis software for 11 years. We know that every training situation is different, and we will tailor a program to suit you.

Options – Conduct your training on or off site, in groups or individual. Shift training is available.

Webinar training – Learn the MaintenanceGuy software without leaving your desk by attending one of our live webinars.

Quality Instructors – All our instructors are qualified Engineers who understand maintenance and who can relate to your people.

Use your own data – our training can be adapted for use with your data, to be more effective.

Safe Tutorial Database – We maintain a training database which is refreshed daily. So you have an area to experiment and learn without risk.

TEST PACKAGES

Choose from six test packages designed to cover a wide range of testing applications to suite your industry and budget. Select the lab which is most convenient for you. If you require a different suite, we will custom design a test program with you. All test package information and standards are printed right on the container for easy reference, where you need it.

Test Packages	Industrial			Engines		
	Yellow	Red	Blue	Yellow	Red	Blue
Spectrochemical Analysis – Arc Emission Spectrometer (20 elements)	■	■	■	■	■	■
Viscosity, cSt @ 40C - ASTM D 445	■	■	■	■	■	■
Viscosity, cSt @ 100C - ASTM D 445				■	■	■
Viscosity Index - ASTM D 2270				■	■	■
Water Content, +ve/-ve. - Crackle	■	■	■	■	■	■
Water Content, % vol. - Karl Fischer ASTM D 1744 (done only if crackle is positive)			■			■
Fuel Dilution, % vol. - Fuel Dilution Meter				■	■	■
Glycol, +ve/-ve ASTM D 2982					■	■
Fuel Soot, % - FTIR					■	■
Oxidation - FTIR	■	■	■		■	■
Nitration (Gas Engines) - FTIR				■	■	■
Total Base Number - ASTM D 4739					■	■
Total Acid Number - ASTM D 664		■	■			
Wear Particle Analysis - Analytical			■			■
Particle Count - ISO 4406			■			

Features

Engine Tests – three tests specifically designed for machines which involve internal combustion.

Industrial Tests –Use these kits for testing oil from Gears, Differentials, Final Drives, Hydraulics, Turbines and compressors.

YELLOW - For sites with a new Oil Analysis Program, where only limited sampling is being done and not yet doing in-depth analysis

RED - For sites with an active Oil Analysis Program including analysis to extend drain intervals for example

BLUE - For the advanced Oil Analysis Program where detailed analysis is required. Test results are reviewed as part of processes for problem resolution.

Other – Other tests are available on request. Please call ConocoPhillips on 1800 255 9556 for pricing.

ENGINEERING & IT SERVICES

Great tools like software and sample kits are an important part of your condition monitoring program, but sometimes, knowing how to use them properly to achieve your specific goals is even more important.

In 1994, Dingo began providing software implementation services and training to customers. In 1999 we added an Engineering Services division and in 2002 we launched our Information Management Group. Ask us to show you how we might help you to reach your goals.

Engineering Services

- Opportunity Assessments
- Sample Point Installation
- Sample Techniques Training
- Oil Analysis Education
- Site based interpretation Services
- Component Life Extension Programs
- Warranty Programs
- Oil Drain Extension Programs
- Condition Based drain programs
- Noria training classes

Skills

- OMA Certified Engineers
- Noria Certified Instructors
- Noria Franchisee in Asia-Pacific

Information Technology Services

- Custom Software development
- Integration with CMMS / EAM systems
- LIMS system integration
- Testing Hardware Interfaces
- Custom Reports
- Web Portal Development
- Functional Specification Development
- Detailed Design Spec development

Skills

- Microsoft .NET
- C#
- SQL Server
- Oracle
- Delphi
- Visual Basic



Features

Opportunity Assessment – In this process, our engineers visit your site for at least a week and produce a comprehensive report that:

- Establishes where your current oil analysis program is relative to best practice
- Provides a detailed project plan for improvement
- Details a cost benefit analysis with Return on Investment

Site Programs – our site based project managers can help you implement your program – from 1 week to 36 months .

SDM – Our eleven step System Development Methodology ensures that your software projects are completed on time and on budget.

REQUIREMENTS & HOW TO SIGN UP

This table outlines the hardware and operating system requirements and recommendations for Dingo MaintenanceGuy's optimum speed and performance.

Workstation Requirements

Operating System	Microsoft® Windows® 98, Windows® 98 Second Edition Windows® Millennium Edition Windows NT® 4.0 Workstation or server with Service Pack 6.0a or later Windows® 2000 Professional or Server Windows® 2000 Advanced Server Windows® XP Home Edition Windows® XP Professional
Processor	Pentium 133 or faster
RAM	64 MB 128 MB recommended
Web Browser	Microsoft Internet Explorer 5.5 with Service Pack 2 or greater
Installation Footprint	30 MB for Microsoft .NET framework installation
Monitor	SVGA color with 800 x 600 resolution (1024 x 768 recommended)
Internet Connection	28 kbps dial up (min). 56kbps or higher (rec)

How to sign up for the program

Call	ConocoPhillips Customer Service USA 1-800-255-9556 Dingo Maintenance Systems USA 1-888-346-4630 Asia-Pacific 61-7-3115-9000
Web	You can sign up and purchase kits on-line at purchase lubes.conoco.com
People	Contact your ConocoPhillips or Dingo account manager for more information on the program.
Labs	If you are use or operate a lab that is not currently part of the program, and would like information on becoming a part of the network, call Paul Higgins on (303) 662 9103