

ENROLL TODAY
1-800-268-2131
www.lubrigard.com

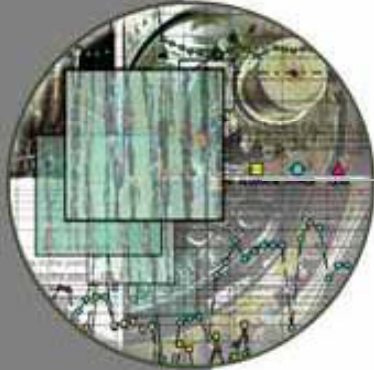
Lubrication & Oil Analysis Seminars

COURSE SCHEDULE 2013

PRESENTED BY



OFFERING OMA-I,
OMA-II, AND CLS
CERTIFICATION
TESTING



LUBRIGARD WILL
TEACH YOU THE
SKILLS TO MOVE
YOUR MAINTENANCE
PROGRAM FROM
*REACTIVE TO
PROACTIVE.*

I f you are asking yourself these questions then this seminar is for you

- ▼ *I am faced with limited resources and a reduced budget. How can I manage my maintenance program more efficiently?*
- ▼ *Where does oil analysis fit into my maintenance program and how do I make the most from what oil analysis is telling me?*
- ▼ *Where do I learn proven procedures to run a world-class oil analysis program without having to learn through trial and error.*
- ▼ *Our oil analysis program is revealing problems. What are the next steps that we need to take to correct them?*



Lubrication & Oil Analysis Seminars

Training Seminars that will Change the Way you View Lubrication & Oil Analysis



Learn how Other Companies have Developed Successful Oil Analysis Programs

Many companies have made oil analysis a successful tool within their maintenance program. For these companies creating a successful oil analysis program took years of experience to develop the knowledge to turn oil analysis data into appropriate maintenance actions. Developing proper oil analysis procedures, learning to properly interpret oil analysis data, and creating a corporate culture that embraced oil analysis was a long journey.

Develop the Knowledge to Kick-Start your own Oil Analysis Program

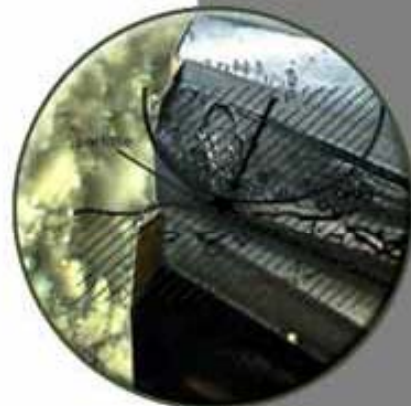
Undoubtedly if you have not taken that journey you are not sure how oil analysis fits within your maintenance program, and you require the knowledge to make oil analysis more successful within your organization.

If you want to avoid making the mistakes these companies made, and if you want to learn the insights that these companies gained by trial and effort you need the training that Lubrigard offers.

Improve the Way you do Maintenance

The Lubrigard Oil Analysis and Advanced Oil Analysis courses will first teach you the fundamentals of oil analysis, then teach you the skills necessary to ensure the success of your own oil analysis program. This course goes beyond the basics and shows you the necessary strategies to improve your maintenance through the integration of oil analysis. In just three days you will gain the knowledge to significantly improve the way you do maintenance within your company.

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LUBRIGARD

A Division of WearCheck

PROACTIVE LUBRICATION MANAGEMENT

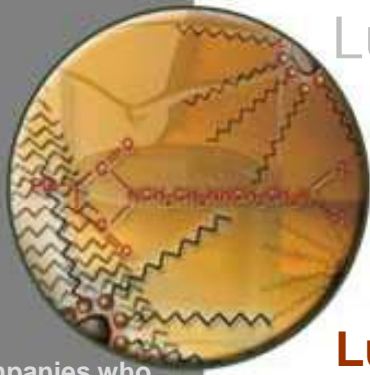
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Join Companies who have benefited from Lubrigard Training Courses

Ainsworth
Alcan
Algonquin Power
Atlantic Minerals
Atlantic Packaging
Basell
Bearskin Airlines
Boeing
Cami Automotive
Canadian Coast Guard
Castrol Lubricants
City of Toronto
Compair
Daimler Chrysler
Dept of National Defense
Entek
Euclid-Hitachi
ExxonMobil Hibernia
Faurecia
Flakeboard
Flightsafety Canada
Ford
Fuchs
General Motors of Canada
Georgia Pacific
Hitachi
Honeywell
Husky Injection Moulding
Inco
John Deere
Kelloggs
Lafarge Canada
Liebherr
Lovat
Lubrication Engineers
Manitoulin Transport
Mobil Chemicals
Ontario Power Generation
Petro-Canada Lubricants
P&H Mine Pro
Ryder Truck Rentals
Safety Kleen
Sandvik Tamrock
SEW-Eurodrive
Stelco - Lake Erie Steel
Tembec
Temple Pembroke
Union Gas
Valvoline Lubricants
Wabush Mines
Wajax Industries
Wescast

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Lubrication & Advanced Oil Analysis (3-Day)

Day 1

Introduction

- The case for condition-monitoring

Lubricant Fundamentals

- The History of oil
- Functions of Lubricating Oil
- Lubrication films
- Mineral oil refining
- Properties of Base Oil
- Viscosity and Classification
- Oil Additives
- Synthetic oils
- Classification of oils
- Performance Tests

Lubricant Performance Tests

- Acid & Base Numbers
- Pour & Flash Points
- Specific & API Gravity
- Seal compatibility
- Color
- Foaming, Dispersion, Demulsibility, Filterability
- Rust & Corrosion
- Oxidation & Thermal Stability
- Tribological Testing

Day 2

Lubricant Analysis

This module provides a detailed analysis of the methods utilized to detect Contamination, Fluid Degradation and Wear & Fatigue in lubricants.

- Dirt
- Rust & Corrosion
- Glycol, Soot, Fuel
- Nitration, Sulphation
- Process Contaminants
- Viscosity
- Acid & Base Number
- Fourier-Transform Infra-Red
- Karl Fischer
- Gas Chromatography
- Particle Count
- Elemental Analysis (ICP, AA, XRF)
- Wear Particle Analysis (PQ, DR-Ferr, A-Ferr, LNF, PDF)

Grease Fundamentals

- Functions of Grease
- Base oils, Additives and Soaps
- Properties of Grease
- Analysis of Grease for Predictive Maintenance

Laboratory Tour

Program Management

- Maintenance Strategies
- The role of Oil Analysis
- Setting Program Goals
- Oil Sampling
- Completing Sample Information
- Reading Oil Analysis Sample Reports



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PROACTIVE LUBRICATION MANAGEMENT

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TO *PROACTIVE*.

Lubrication & Advanced Oil Analysis

Day 3

Filtration & Contamination Control

- The Chain Reaction of Wear
- Dirt and Effects on Component Life
- Filtration Fundamentals and Selection
- Filtration Techniques
- Selecting Filters

Lubrication Excellence

- Lubrication Audit
- Lubrication Survey
- Training
- Lubrication Management
- Lubricant Storage
- Lubricant Dispensing
- Selecting an Oil Vendor
- Responsibilities & Motivation

Interpretation Fundamentals

- Guidelines for Interpretation
- Chameleon Tests
- Interpretation Caveats
- Key Oil Analysis Tests
- Setting Wear Alarms
- Interpretation Workshop

Interpretation of Contamination and Lube Degradation

This module provides theory on oil analysis data interpretation through real-life case studies.

- Lubricant Degradation
- Determining TAN/TBN/Viscosity Limits
- Interpretation of TAN/TBN/Viscosity results
- Additive Depletion
- Contamination
- Setting ISO Targets and Alarms
- Interpretation of Particle Count Data
- Setting water, glycol, soot, fuel limits
- Determining incorrect oil top-ups

Wear Particle Analysis

- Particle Analysis Techniques
- Fundamentals of wear particle morphology
- Wear regimes
- Ferrous Wear Particles
- Non-Ferrous Wear Particles
- Contaminants and Lubricant Degradation
- Determining alloy composition of wear metals

Interpretation of Wear & Fatigue

This module provides theory on oil analysis data interpretation through real-life case studies.

- Understanding Wear Limits
- Determining Wear Limits
- Detailed Wear Case Studies



Hear what others are saying about this seminar

"Excellent information for someone wanting to know more about the interpretation of oil analysis data."

Anthony DeGroot
Bison Transport

"Very helpful to those in reliability improvement. Brought in a lot of thoughts."

Jack Wang
Basell Canada

"Will be very useful in my work as a metallurgical failure analyst. A bargain at twice the price!"

Cordon Snieder
Canspec Group Inc.

"This seminar accurately describes and shows the importance of oil analysis. Through detailed course material, clear teaching and real world examples the student is taught the what, why and how to's of implementing an effective program."

Sebastien Capel
PPI Protoplast

"A great course for other companies who want to start an oil analysis program. A real eye opener."

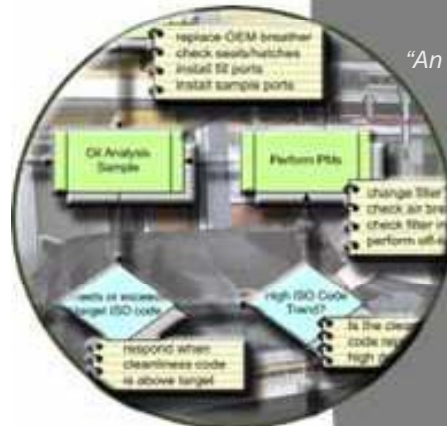
Ray Skanes
Wabush Mines

"An excellent course, the instructor was very knowledgeable"

Jim Jervis
John Deere

"One of the best courses I've attended!"

Gus Velasquez
Lubrisupport



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PROACTIVE LUBRICATION MANAGEMENT

Lubrication & Oil Analysis Seminars

Course Presenter



Bill Quesnel is a longstanding member of the STLE developing his oil analysis experience with WearCheck International where he is currently the Vice-President of WearCheck Canada. Over his 20 years in the industry Bill has helped many large companies establish successful oil analysis programs, and having time and time again witnessed the need for lubrication management programs founded Lubrigard to provide clients with the necessary services, training and products to manage their lubricants effectively.

OMA I and OMA II certified

Seminar Comments

"A good complement to vibration analysis. It also connects a worker with his maintenance activities."

*Pierre Paquet
Emco*

"You have an excellent lubrication training course. Well crafted, a good guide. Well explained. I really liked your trainer."

*Pascal Lortie
Aur Resources*

"Anyone involved in the lubrication domain should participate."

*Jean Martin
Kruger inc.*

"The course is well structured. Many examples of real life situations. Good source of information. Many practical examples for day to day work."

*Yves Tremblay
Petro-Canada*

"The course is very interesting and completes a mechanical training, supplying more knowledge to lubrication specialists."

*Jean Veilleux
Abitibi Consolidated*

On-Site Training

You can bring an oil analysis and equipment lubrication training courses on-site to your facility. On-site training courses can be customized to meet your specific training requirements. To enquire about an on-site training course at your facility call 1-800-268-2131.

For further information visit; <http://www.lubrigard.com/training/oa/>

Get Certified
by the STLE



The Society of Tribologists and Lubrication Engineers (STLE) will be conducting OMA-I, OMA-II, and CLS certification exams the morning following selected course dates.

Register directly on the STLE Web site at <http://www.stle.org> or contact Lubrigard at 1-800-268-2131 to arrange for testing.



2013 Schedule

Courses will be held at Lubrigard Ltd

1175 Appleby Line, Building C, Burlington, ON L7L 5H9

Seminar Dates (please check one)

- April 23-25, 2013
 October 22-24, 2013

Hotel Accommodations supplied by the Hilton Garden Inn

985 Syscon Road, Burlington, ON L7L 5S3

+1 905-631-7000 fax +1 905-631-7010



For the latest information on training courses visit: <http://www.lubrigard.com/training/oa/>.

Registration Form

Course Information **Please Enroll me for the Following Course** (check date above)

- Lubrication & Advanced Oil Analysis (3 days) \$1495 (plus applicable taxes)
 Lubrication & Oil Analysis (Days 1 and 2) \$1095 (plus applicable taxes)
 Basic Lubrication (Day 1) \$645 (plus applicable taxes)
I would like to write a STLE Certification Exam: OMA Level I OMA Level II CLS
*STLE Certification exams are held on the morning following course completion. All STLE Certification Exams are payable to the STLE (members \$295 / non-members \$400). See www.stle.org for more info.

Company Information (please print)

Company Name _____
Contact Name _____
Contact Phone _____ Fax _____
E-Mail Address _____
Address _____
City _____ State/Prov _____ Zip/Postal _____

Attendees

First and Last Name	Phone Number	Email
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____

Payment Option

- Cheque payable to Lubrigard Ltd. is enclosed.**
Charge to: Visa MasterCard American Express
Card Number _____ Expiry Date mm / yyyy _____
Cardholder Name _____
Signature _____
 Purchase order attached. P.O. Number _____

To Enroll

Call Toll-Free
1-800-268-2131

Fax Completed form
905-569-8605

Mail form & cheque to
Lubrigard Ltd.
C8-1175 Appleby Line
Burlington, ON
L7L 5H9

For more information
<http://www.lubrigard.com/training/oa/>

Would you like a
Lubrigard representative
to contact you?

Yes No