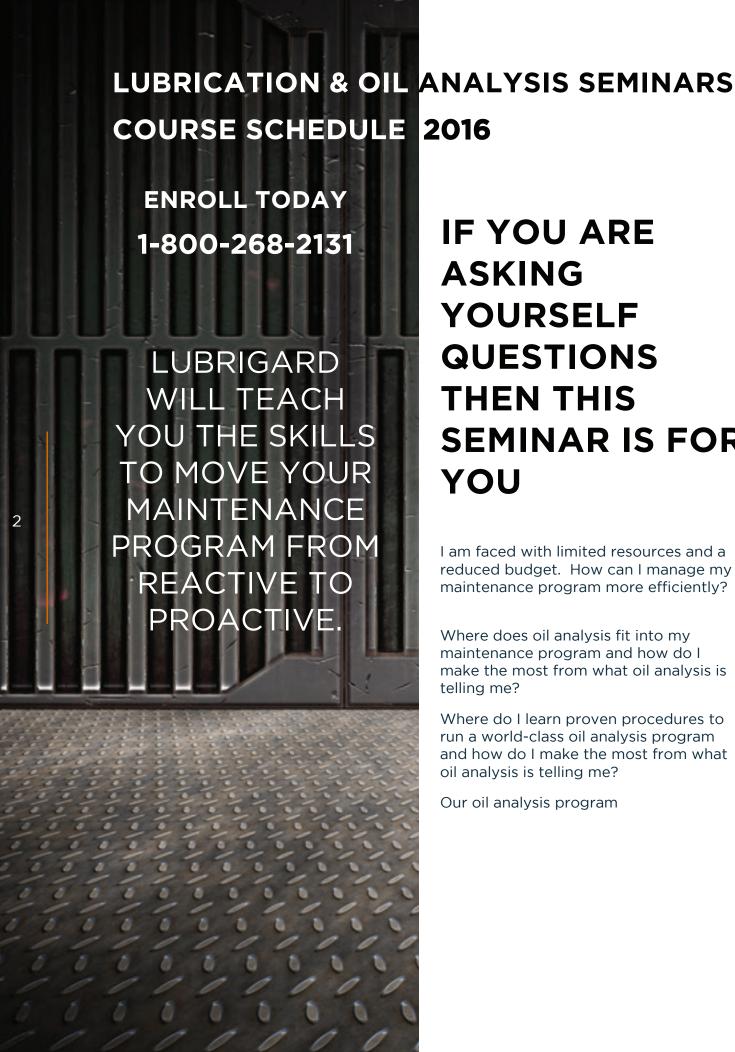


LUBRICATION & OIL ANALYSIS SEMINARS





IF YOU ARE **ASKING** YOURSELF **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 and how do I make the most from what oil analysis is telling me?

Our oil analysis program

TRAINING SEMINARS THAT WILL CHANGE THE WAY YOU VIEW LUBRICATION & OIL ANALYSIS

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.

LEARN HOW
OTHER COMPANIES
HAVE DEVELOPED
SUCCESSFUL
OIL ANALYSIS
PROGRAMS

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. DEVELOP THE KNOWLEDGE TO KICK-START YOUR OWN OIL ANALYSIS PROGRAM

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.

IMPROVE THE WAY YOU DO MAINTENANCE

THE LUBRIGARD LUBRICATION AND OIL ANALYSIS SEMINAR HAS BEEN DESIGNED FOR RELIABILITY & LUBRICATION PROFESSIONALS WORKING TOWARDS OMA I / OMA II CERTIFICATION.



DAY 1

LUBRICANT FUNDAMENTALS

INTRODUCTION
FUNCTIONS OF LUBRICATING OIL
LUBRICATION FILMS
MINERAL OIL REFINING

LUBRICANT PROPERTIES

THIS MODULE PROVIDES AN UNDERSTANDING OF OIL PROPERTIES BY DECONSTRUCTING TECHNICAL DATA SHEETS FOR A NUMBER OF COMMON OIL PRODUCTS.

VISCOSITY CLASSIFICATION (SAE, ISO, AGMA, NLGI)

OXIDATION & THERMAL STABILITY (AN, BN, RPVOT, RULER, TOST, FT-IR)

LOW TEMPERATURE OPERATION (POUR POINT)

BASE OIL CHARACTERISTICS (SPECIFIC / API GRAVITY, FLASH POINT, FT-IR)

AIR ENTRAINMENT (FOAM CHARACTERISTICS)

WATER SHEDDING & RUST AND CORROSION CONTROL (DEMULSIBILITY / SEPARABILITY)

DETECTING CONTAMINATION

ELEMENTAL ANALYSIS (ICP, AA, XRF)
WEAR PARTICLE SCREENING (PQ, DR-FERR)
WEAR PARTICLE ANALYSIS (A-FERR, LNF, PDF, FDA)

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

Husky Injection Moulding
Inco
John Deere
Kelloggs
Lafarge Canada
Liebherr
Lovat
Lubrication Engineers
Manitoulin Transport
Mobil Chemicals
Ontario Power Generation
Petro-Canada Lubricants

Honeywell

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

DAY 2

PROGRAM MANAGEMENT

MAINTENANCE STRATEGIES
THE ROLE OF OIL ANALYSIS
SETTING PROGRAM GOALS
OIL SAMPLING
COMPLETING SAMPLE INFORMATION
READING OIL ANALYSIS SAMPLE REPORTS

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

FERROGRAPHY/FERROUS DEBRIS

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

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



HERE IS WHAT OTHERS ARE SAYING ABOUT THIS SEMINAR

"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



STLE developing his oil analysis experience with WearCheck International where he is currently the Vice-President of WearCheck Canada. Over his 15 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 LAND OMA IL CERTIFIED

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

2016 SCHEDULE

Courses will be held at Lubrigard Ltd 1175 Appleby Line, Building C, Burlington, ON L7L 5H9

Seminar Dates (please check one)

April 20-21, 2016 October 19-20, 2016 Hotel Accommodations supplied by the Hilton Garden Inn 985 Syscon Road, Burlington, ON L7L 5S3 +1 905-631-7000 fax +1 905-631-7010 http://hiltongardeninn3.hilton.com/en/hotels/ontario/hilton-garden-inn-toronto-burlington-YYZBUGI/index.html For the latest information on training courses visit: http://www.lubrigard.com/training/ REGISTRATION FORM The cost of the Lubrication & Advanced Oil Analysis Seminar (2 days): \$995 (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. Register online at https://www.lubrigard.com/training-seminar.php#content Company Name _____ Contact Name _____ Contact Phone () Fax () E-Mail Address _____ Address _____ City _____State/Prov ____ Zip/Postal ____ **ATTENDEES** First and Last Name Phone Number Email 2. _____ **PAYMENT OPTION** Cheque payable to Lubrigard Ltd. is enclosed. Charge to: Visa MasterCard American Express Card Number _____ Expiry Date _____ Cardholder Name 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 LUBRIGARD.COM/TRAINING

WOULD YOU LIKE A LUBRIGARD REPRESENTATIVE TO CONTACT YOU?

☐YES ☐NO

