Considerations in Air Compressor Fluid Design and Development

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Summary: The design and development of a robust air compressor fluid must ensure long fluid life and smooth operation for lubrication, sealing and cooling. Improving the oxidation stability has always been on the forefront in fluid design goals. Additives that are specially selected and uniquely combined will provide the utmost benefit to highly processed mineral or synthetic oils. As the lubricant must endure the stresses placed upon it from the environment, equipment use, type of compressor, and maintenance practices - these factors all must be considered in product development. Testing in the laboratory can provide a broad assessment of lubricant performance, with hot room or field testing necessary to verify new formulations, quantify lubricant stability and evaluate performance with real-world operational variations.

Biography: Inga Kuksis is a Product Specialist in the Research and Development group of Petro-Canada Lubricants. Over 10 years at Petro-Canada, her work has involved the development of new products, as well as technical and quality support for various product lines including heat transfer fluids, food grade lubricants, gear and windturbine fluids, as well as air and natural gas compressor oils. She received her Ph.D. in Organometallic Chemistry from Queen's University in Kingston, ON and her BSc. in Chemistry and Human Biology from the University of Toronto. Inga is a member of the STLE and has presented papers at both national and section meetings.