LUBE TECHNI-GRAM

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JUNE 2004

PROPER CHANGEOVER PROCEDURES CAN HELP ELIMINATE COMPRESSOR PROBLEMS

DOES YOUR ROTARY COMPRESSOR RUN HOT?
DOES YOUR HIGH AIR TEMPERATURE WARNING LIGHT COME ON?
DOES YOUR COMPRESSOR TRIP-OUT DUE TO HIGH AIR TEMPERATURE?
CAN YOU SEE A BROWN GLAZE IN YOUR SEPARATOR TANK?

If you answered "yes" to any of the above questions, then you probably have a dirty or varnished compressor. Rotary compressors will build up dirt, and depending on the quality of the oil being used, whether mineral or synthetic, varnish can accumulate. This varnish needs to be removed from the compressor as the varnish acts as insulator in the compressor heat exchanger. This varnish inside the heat exchanger is usually what causes the machine to overheat and operate at maximum temperature (in excess of 200-225ºF) instead of normal operating temperature (approximately 180-195ºF). The older the compressor, the greater the tendency for deposit formations. Since these deposits can be "cleaned out" after converting to a different oil … especially a higher quality oil such as SWEPCO Compressor Oils … proper changeover procedures and close monitoring of equipment are strongly recommended.

With compressor manufacturers joining the trend of other original equipment manufacturers (OEM) in attempting to capitalize on selling the lubricating fluid that goes into their equipment by having semi-synthetics or synthetics private labeled under their brand name, the following caution statement is becoming an ever increasing sign of the times:

> **CAUTION!** Do not mix (private label brand name) with any other lubricant. Failure to follow these recommendations will cause severe lubricant breakdown, resulting in the formation of heavy varnish and sludge throughout the system. This will result in clogged lubricant separators, coolers, and internal lubricant passages. Warranty will be void.

Because of this increasing trend of OEM's attempt to capitalize on the fluid market with semi-synthetics or synthetics, and an equally increasing desire of maintenance personnel to change to a higher quality mineral oil upon warranty expiration due to exorbitant prices of OEM's "private label" brand or simply a dissatisfaction with synthetic performance, it is imperative that we stress the importance of following compressor changeover procedures for SWEPCO lubricants as printed in Southwestern Petroleum Corporation's Lubrication Tips #1:

SECTION I. Replacing other Petroleum-Based oils with SWEPCO's Air Compressor Oils

Drain the used commercial grade lubricant completely, while still hot.

Fill with the appropriate grade of **SWEPCO 702 Rotary Compressor Oil**, **SWEPCO 707 Reciprocating Compressor Oil** or **SWEPCO 305 Supreme Formula Engine Oil** depending on the type of unit.

Regularly check the oil filter(s) and air/oil separator (**if so equipped**) since there is a good possibility that the SWEPCO lubricant will loosen many deposits left by the previous lubricants.

Drain the oil while hot at one-half the normal drain interval. An oil sample should be taken at this time.

Fill with appropriate SWEPCO product and run to the normal drain interval. **Change oil filter(s) and air/oil separator <u>as required</u>**. Take an oil sample.

Use the oil analysis results to establish the drain interval using the appropriate SWEPCO product.

SECTION II. Replacing a semi-synthetic or synthetic oil with SWEPCO's.

Completely drain the used synthetic oil while hot.

Fill with the appropriate grade of **SWEPCO 702 Rotary Compressor Oil**, **SWEPCO 707 Reciprocating Compressor Oil** or **SWEPCO 305 Formula Engine Oil** depending on the type of unit.

Run compressor for two to eight hours, no longer. Petroleum-based lubricants are often incompatible with synthetic oils. Therefore, every effort must be made to completely remove the synthetic oil; and, this flushing procedure should do that.

Drain the oil while hot and **replace oil filter(s)**. An oil sample should be taken at this time. **<u>Regularly</u> check the air/oil separator (if so equipped)**.

Fill with the appropriate SWEPCO product and run to the normal drain interval. **Change oil filter(s) and air/oil separator <u>as required</u>**. Take an oil sample.

Use the oil analysis results to establish the drain interval using the appropriate SWEPCO product.

Compressors with a significant number of hours frequently have a large amount of deposits and may require additional oil, oil filter(s) and air/oil separator changes to completely clean the compressors and restore them to their maximum operating efficiency.