

**Automatic Transmission Alarm Limits**

**LubeDoc Alarm Series 04**

(Limits for basic 15,000 miles or 500 hours run time)

(Trending is a must for determination of wear debris, see note below)

Elements		Normal	Abnormal	Critical
<b>Fe</b>	Iron	<60	61-120	>120
<b>Pb</b>	Lead	<90	91-190	>190
<b>Cu</b>	Copper	<65	66-135	>135
<b>Cr</b>	Chromium	<5	6-15	>15
<b>Al</b>	Aluminum	<10	11-25	>25
<b>Si</b>	Silicon	<20	20-30	>30
<b>KF</b>	Karl Fisher Water	<99	>100-225	>225
<b>KF</b>	Karl Fisher Water	<99	>100-225	>225
—	ISO Code	<19/15	<19/16	>22/16
<b>TAN</b>	Total Acid Number	New Oil Test	+3.0 Change from New	> + 4.0 Change from New
<b>Vis</b>	Viscosity 100 C	5-10 Brands Vary	+/- 25% Change of New	+/- 35% Change of New
—	Glycol	No Trace Allowed		
—	Water	0.2% Maximum		

Note: Boron, Potassium, Phosphorus, Zinc, Calcium, Barium, Magnesium, Titanium, Molybdenum and Cadmium have no established limits. Compare with new oil reference sample and plot trends.

Note: This table should be used as a GENERAL GUIDE ONLY. It is subject to continual change, and SHOULD NOT BE CONSIDERED CURRENT OFFICIAL OEM LIMITS, GUIDELINES OR RECOMMENDATIONS OF ANY KIND, as it is derived from many different sources. OEMS do not always make their most current, official limits readily available to commercial oil analysis labs. Effective date 2/15/01.

Note: Some Alarm Limits above may vary to other outside sources. LubeTrak has established these limits to assist in the protection of components for our customers and as such, our limits may be lower than recommended limits of the OEM manufacturer.

Note: Always run a quality fluid in your automatic transmission. Fluid sample frequency may need modification due to analysis results.

Note: Always sample additive metals (Ba, B, Ca, Mg, P, Na, Zn)