



Elements		2 CYCLE (6V-92)			4 CYCLE-40, 50, 60 series		
		Normal	Abnormal	Critical	Normal	Abnormal	Critical
Fe	Iron	<120	120-150	>150	<150	150-175	>175
Cr	Chromium	<20	20-25	>25	<15	15-20	>20
Pb	Lead	<40	40-50	>50	<40	40-50	>50
Cu	Copper	<40	40-50	>50	<40	40-50	>50
Sn	Tin	<30	30-40	>40	<20	20-30	>30
Al	Aluminum	<20	20-30	>30	<30	30-40	>40
Ni	Nickel	*	*	*	*	*	*
Ag	Silver	*	*	*	*	*	*
Mn	Manganese	<2	2-6	>6	<2	2-6	>6
Si	Silicon	<15	15-30	>30	<15	15-30	>30
B	Boron	<30	>30	-	<30	>30	-
Na	Sodium	<20	>20	-	<20	>20	-
Mg	Magnesium	<20	20-40	>40	<20	20-40	>40
Ca	Calcium	>1800	1800-1400	<1400	>1800	1800-1400	<1400
Ba	Barium	*	*	*	*	*	*
P	Phosphorus	>1000	1000-750	<750	>1000	1000-750	<750
Zn	Zinc	>900	900-700	<700	>1000	1000-800	<800
Mo	Molybdenum	<15	15-40	>40	<15	15-40	>40
Ti	Titanium	*	*	*	*	*	*
V	Vanadium	*	*	*	*	*	*
K	Potassium	<2	2-4	>4	<2	2-4	>4
Viscosity		13.0-15.8	12.5-1.29/15.9-16.3	<12.5/>16.3	13.0-15.8	12.5-12.9/15.9-16.3	<12.5/>16.3
Water		<.1	.1 to .3	>.3	<.1	.1 to .3	>.3
Soot %		<1.5	1.5-3.0	>3.0	<3	3-4.5	>4.5
Fuel Dilution %		<2	2 - 2.5	>2.5	<2	2 - 2.5	>2.5
Glycol		<.2	.2-.5	>.5	<.2	.2-.5	>.5
Nitration		<3.0	3.0-5.0	>5.0	<3.0	3.0-5.0	>5.0
Oxidation		<15	15-20	>20	<15	15-20	>20
TAN "Total Acid #"		<3.5	3.5-4.0	>4.0	<3.5	3.5-4.0	>4.0
TBN "Total Base #"		>4.0	3.5-4.0	<3.5	>4.0	3.5-4.0	<3.5

Note: This table should be used as a general guide only. These are recommendations for Detroit Diesel Engines.

Note: * Lab test for these elements, but they are not normally found in engines applications.