

Report of the Month

This AEIO-360 obviously had a problem. What was wrong?

To learn more about where the elements are coming from, [click here](#).

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	30	UNIT/ LOCATION AVERAGES				UNIVERSAL AVERAGES
	MI/HR on Unit	703					
	Sample Date	4/30/15					
ALUMINUM	37	37					9
CHROME	12	12					3
IRON	227	227					46
COPPER	11	11					14
LEAD	4039	4039					2343
TIN	1	1					1
MO LYBDENUM	3	3					1
NICKEL	5	5					1
POTASSIUM	3	3					2
BORON	0	0					3
SILICON	11	11					7
SODIUM	1	1					2
CALCIUM	73	73					4
MAGNESIUM	2	2					2
PHOSPHORUS	210	210					414
ZINC	15	15					10
BARIUM	37	37					0

Values
Should Be*

PROPERTIES	SUS Viscosity @210°F	90.8	86-105			
	cSt Viscosity @ 100°C	18.17	17.0-21.8			
	Flashpoint in °F	445	>430			
	Fuel %	<0.5	<1.0			
	Antifreeze %	-	-			
	Water %	0.0	0.1			
	Insolubles %	0.3	<0.6			
	TBN					
	TAN					
	ISO Code					

*THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

The owner writes: This is a big thank you message. The analysis on the AEIO-360-B2F engine in my CAP-10B showed high levels of aluminum, iron, and chromium. I went back and pulled the oil screen again. We did find some ferrous metal that I had at first taken to be carbon. We found enough to suspect the camshaft so I opted to pull a jug and inspect the cam. The cam was pitted and starting to spall. The high level of aluminum was coming from the piston skirts that were severely scuffed and scored. Wrist pins and rocker shafts showed pitting as well. I believe this engine was headed for a catastrophic failure in the not-too-distant future. The engine is now getting a major overhaul to be sure we got everything. Thank you!