

## Report of the Month

This GO-300 has a problem. What's going on?  
To learn where the elements are coming from, [click here](#).

UNIT	MAKE/MODEL:	Continental GO-300	OIL TYPE & GRADE:	Phillips XC (A/C) 20W/50
	FUEL TYPE:	Gasoline (Leaded)	OIL USE INTERVAL:	26 Hours
	ADDITIONAL INFO:	Cessna C175, Mixed Chrome/Steel		

COMMENTS	Unfortunately, this is not a good report for your GO-300. This engine was making pretty steady trends a few years back, but aluminum, chrome, and iron have all skyrocketed in this sample. You mentioned a cylinder that has lower compression, so that will be a good place to start in looking for the problem. There could be other bad cylinders too -- this is a drastic change and a lot of metal. Silicon is up too -- it may show some sort of dirt in the system. Let us know what you find out--we're curious. This is a cautionary report.
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	MI/HR on Oil	26	UNIT / LOCATION AVERAGES	34	23	32	28	32	UNIVERSAL AVERAGES
	MI/HR on Unit	1,139		1,119	1,090	1,076	1,052	1,031	
	Sample Date	10/12/2013		4/27/2013	9/28/2012	3/9/2012	8/27/2011	4/14/2011	
	Make Up Oil Added	2 qts		2 qts	2 qts	3 qts	3 qts	4 qts	
ELEMENTS IN PARTS PER MILLION	ALUMINUM	128	15	35	13	16	11	14	15
	CHROMIUM	70	9	17	7	12	11	16	4
	IRON	115	48	69	45	63	59	65	49
	COPPER	12	7	9	6	7	7	7	12
	LEAD	3526	2707	3834	2650	3643	2987	3249	1738
	TIN	0	1	0	0	0	0	0	1
	MOLYBDENUM	2	2	2	1	2	2	3	3
	NICKEL	5	3	3	2	3	3	4	2
	MANGANESE	2	1	1	1	1	1	1	1
	SILVER	0	0	0	0	0	0	0	0
	TITANIUM	0	0	0	0	0	0	0	0
	POTASSIUM	2	1	0	2	0	0	3	1
	BORON	0	1	1	1	0	0	1	1
	SILICON	25	10	13	10	15	11	10	10
	SODIUM	1	2	5	2	1	0	1	2
	CALCIUM	7	31	7	6	6	6	5	25
	MAGNESIUM	4	2	3	1	1	2	1	11
	PHOSPHORUS	0	215	0	0				168
	ZINC	1	2	2	2				6
	BARIUM	0	0	0	0				0

PROPERTIES	Values Should Be*			
	SUS Viscosity @ 210°F	96.6	86-105	100.6
	cSt Viscosity @ 100°C	19.55	17.0-21.8	20.51
	Flashpoint in °F	480	>430	480
	Fuel %	<0.5	<1.0	<0.5
	Antifreeze %	-	-	-
	Water %	0.0	0.0	0.0
	Insolubles %	0.4	<0.6	0.3
	TBN			
	TAN			
	ISO Code			



\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

The owner writes: Your report was right on the money. The number 5 piston broke the top ring and was beginning to come apart. That was the cylinder with the low compression during my annual. I changed out that whole cylinder, piston and all, with a new one from Continental. Thanks for the heads up!