



OIL REPORT

LAB NUMBER: D35948

UNIT ID: N3212T

REPORT DATE: 4/8/2008

CLIENT ID: 23123

CODE: 41/284

PAYMENT: CC: Visa

UNIT	MAKE/MODEL: Lycoming O-320-E2D	OIL TYPE & GRADE: Aeroshell W100 (AD)
	FUEL TYPE: Gasoline (Leaded)	OIL USE INTERVAL: 8 Hours
	ADDITIONAL INFO: Cessna 177; Eng S/N L-26623-27A, 4 new Cylinders added around 4/2007	

CLIENT	CHARLES MOUNT	PHONE: (904) 813-0636
	1621 HAMPTON PLACE	FAX:
	ORANGE PARK, FL 32003	ALT PHONE:
		EMAIL: chuck@mountpoint.org

COMMENTS	CHARLES: The short oil change interval of 8 hours helped reduce the amount of metals we found in the latest oil from your Lycoming. You noted this time that your O-320 has steel cylinders so the high chrome we are finding is coming from the piston rings. While it, iron and copper all dropped, overall, the wear rate (ppm/hour) of chrome increased while iron and copper stayed about the same. All three may still be due to lingering wear-in and rings seating. We don't know for sure since we don't know total engine hours. Keep using short oil change until wear improves.
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ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	8	UNIT / LOCATION AVERAGES	20	27	42	30	UNIVERSAL AVERAGES
	MI/HR on Unit	2,265		216	148	72	79	
	Sample Date	03/18/08		12/20/07	06/04/07	02/02/07	06/29/06	
	Make Up Oil Added	0 qts		0 qt	1 qt		2 qts	
	ALUMINUM	4	8	9	8	9	9	5
	CHROMIUM	17	36	38	18	40	69	6
	IRON	13	41	42	69	40	40	23
	COPPER	4	11	10	19	13	11	5
	LEAD	766	1791	1573	1719	2885	2014	2507
	TIN	0	2	1	4	2	2	1
	MOLYBDENUM	0	0	0	0	0	0	0
	NICKEL	1	4	2	2	7	6	2
	MANGANESE	0	0	0	1	0	1	0
	SILVER	0	0	0	0	0	0	0
	TITANIUM	0	0	0	0	0	0	0
	POTASSIUM	0	1	1	3	0	0	0
	BORON	0	0	0	0	0	0	0
	SILICON	6	10	12	26	4	4	5
	SODIUM	0	0	0	2	0	0	0
	CALCIUM	0	2	0	9	1	2	3
	MAGNESIUM	0	1	1	1	1	0	0
	PHOSPHORUS	0	111	0	58	498	0	432
	ZINC	0	4	2	17	2	1	4
	BARIUM	0	0	0	0	0	0	0

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	86.9	86-105	91.1	97.5	95.5	79.7
	cSt Viscosity @ 100°C	17.24	17.0-21.8	18.25	19.76	19.29	15.44
	Flashpoint in °F	495	>460	510	515	485	465
	Fuel %	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5
	Antifreeze %	-		-	-	-	-
	Water %	0.0	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.3	<0.6	0.4	0.4	0.3	0.4
	TBN						
	TAN						
	ISO Code						

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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