



# OIL REPORT

LAB NUMBER: H39585

UNIT ID: N3212T

REPORT DATE: 3/23/2016

CLIENT ID: 23123

CODE: 41/32

PAYMENT: CC: Discover

**UNIT**

MAKE/MODEL: Lycoming O-320-E2D

OIL TYPE &amp; GRADE: Aeroshell W100 (AD)

FUEL TYPE: Gasoline (Leaded)

OIL USE INTERVAL: 44 Hours

ADDITIONAL INFO: Cessna 177; Eng S/N L-26623-27A

**CLIENT**CHARLES MOUNT  
3504 MORNINGWOOD CT NE  
SUWANEE, GA 30024PHONE: (904) 813-0636  
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ALT PHONE:  
EMAIL: chuck@mountpoint.org**COMMENTS**

CHARLES: Metals continue to increase in this latest report from N3212T, and lead (from fuel blow-by) is going up as well. A few years ago, we weren't marking chrome at these levels, but unless the engine has chrome or Millennium steel cylinders, this level of chrome could show ring wear. Iron, from steel parts like cylinders, is at the highest level on the page, and if there's a ring/cylinder problem, that could be leading to the excess blow-by. It's also possible that operational conditions are affecting things, but test compressions and try 25 hours to monitor.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	44	UNIT / LOCATION AVERAGES	44	35	22	25	6	UNIVERSAL AVERAGES
	MI/HR on Unit	602		535	2,335	416	394	2,430	
	Sample Date	3/8/2016		7/9/2014	2/9/2013	1/14/2012	9/10/2011	4/24/2011	
	Make Up Oil Added	2 qts		4 qts	2 qts	1 qt	2 qts	0 qts	
	ALUMINUM	10	7	5	6	4	5	3	5
	CHROMIUM	25	32	17	20	20	26	12	6
	IRON	81	49	56	47	34	34	27	24
	COPPER	6	8	6	7	6	6	3	5
	LEAD	5051	2297	3736	2954	2365	2300	954	2714
	TIN	3	2	3	1	4	3	0	1
	MOLYBDENUM	0	0	0	0	0	0	0	0
	NICKEL	6	4	6	6	5	5	2	2
	MANGANESE	1	0	0	1	0	0	0	0
	SILVER	0	0	0	0	0	0	0	0
	TITANIUM	0	0	0	0	0	0	0	0
	POTASSIUM	2	1	0	0	0	3	2	1
	BORON	1	0	0	1	1	0	0	1
	SILICON	4	7	4	4	4	4	3	5
	SODIUM	2	0	1	1	0	0	0	1
	CALCIUM	0	2	0	0	0	0	0	15
	MAGNESIUM	0	0	0	0	0	0	0	1
	PHOSPHORUS	6	70	0	26	4	0	3	525
	ZINC	2	3	2	2	1	0	0	4
	BARIUM	0	0	0	0	0	0	0	0

Values  
Should Be\*

PROPERTIES	SUS Viscosity @ 210°F	99.2	86-105	98.5	94.5	85.8	90.7	93.4
	cSt Viscosity @ 100°C	20.18	17.0-21.8	20.01	19.05	16.97	18.15	18.79
	Flashpoint in °F	470	>460	445	530	460	515	490
	Fuel %	<0.5	<1.0	0.8	<0.5	TR	<0.5	<0.5
	Antifreeze %	-	-	-	-	-	-	-
	Water %	0.0	<0.1	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.4	<0.6	0.3	0.4	0.3	0.0	0.2
	TBN							
	TAN							
	ISO Code							

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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