



OIL REPORT

LAB NUMBER: M39303
REPORT DATE: 7/2/2020
CODE: 41/68

UNIT ID: N3212T
CLIENT ID: 23123
PAYMENT: CC: Visa

UNIT	MAKE/MODEL: Lycoming O-320-E2D	OIL TYPE & GRADE: Aeroshell W100 (AD)
	FUEL TYPE: Gasoline (Leaded)	OIL USE INTERVAL: 52 Hours
	ADDITIONAL INFO: Cessna Cardinal 177; Eng S/N L-20623-27A, 17700512	

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

COMMENTS	CHARLES: Back in 2014, you notified us the cylinders were all steel, but you marked chrome this time. If they are actually chrome (or Millennium steel), that's fine. Just let us know either way and we'll add a note to N3212T's file so there won't be any confusion. Chrome and iron are high, even for a 51.86-hour run. Chrome could show ring or cylinder wear, and iron could be from the rings (for chrome jugs) and other steel parts. Blow-by doesn't appear excessive so if compressions were fine at the last annual and temps are normal, just check for oil filter metal and check back.
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ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	52	UNIT / LOCATION AVERAGES	29	6	52	44	44	UNIVERSAL AVERAGES
	MI/HR on Unit	804		752	722	678	602	535	
	Sample Date	6/20/2020		10/17/2019	9/20/2018	9/17/2017	3/8/2016	7/9/2014	
	Make Up Oil Added	3 qts		2 qts	0 qts	2 qts	2 qts	4 qts	
	ALUMINUM	9	7	6	3	16	10	5	5
	CHROMIUM	19	29	12	5	23	25	17	5
	IRON	70	50	51	32	78	81	56	25
	COPPER	6	7	3	2	5	6	6	5
	LEAD	3696	2359	3018	1352	4809	5051	3736	2954
	TIN	3	2	0	0	1	3	3	1
	MOLYBDENUM	0	0	0	0	0	0	0	0
	NICKEL	6	4	4	2	4	6	6	2
	MANGANESE	1	0	1	0	1	1	0	0
	SILVER	0	0	0	0	0	0	0	0
	TITANIUM	0	0	0	0	0	0	0	0
	POTASSIUM	0	1	0	1	1	2	0	1
	BORON	1	0	0	2	0	1	0	1
	SILICON	4	7	4	4	5	4	4	5
	SODIUM	1	1	1	2	1	2	1	1
	CALCIUM	1	1	0	1	1	0	0	26
	MAGNESIUM	1	0	0	0	0	0	0	1
	PHOSPHORUS	8	61	15	17	342	6	0	513
	ZINC	3	3	1	1	3	2	2	6
	BARIUM	0	0	0	0	0	0	0	0

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	91.5	86-105	94.4	95.2	98.5	99.2	98.5
	cSt Viscosity @ 100°C	18.33	17.0-21.8	19.03	19.23	20.00	20.18	20.01
	Flashpoint in °F	485	>460	515	495	520	470	445
	Fuel %	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	0.8
	Antifreeze %	-		-	-	-	-	-
	Water %	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.2	<0.6	0.4	0.3	0.2	0.4	0.3
	TBN							
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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