



OIL REPORT

LAB NUMBER: L71839 UNIT ID: N3212T
 REPORT DATE: 10/31/2019 CLIENT ID: 23123
 CODE: 41/32 PAYMENT: CC: Visa

UNIT	MAKE/MODEL: Lycoming O-320-E2D	OIL TYPE & GRADE: Aeroshell W100 (AD)
	FUEL TYPE: Gasoline (Leaded)	OIL USE INTERVAL: 29 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: This sample looks a lot like those that you've done over the past six years. In a way, that's good - not all engines wear like averages so what we really want to see is steady trends over time. That's what you've got here. Even though chrome and iron are still elevated compared to other O-320-E3D engines, they're fine for your particular engine. That's why we decided not to mark them anymore. You can see your own averages in the unit/location column. No contamination is present, and blow-by looks good. Nice report.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	29	UNIT / LOCATION AVERAGES	6	52	44	44	35	UNIVERSAL AVERAGES
	MI/HR on Unit	752		722	678	602	535	2,335	
	Sample Date	10/17/2019		9/20/2018	9/17/2017	3/8/2016	7/9/2014	2/9/2013	
	Make Up Oil Added	2 qts		0 qts	2 qts	2 qts	4 qts	2 qts	
ALUMINUM	6	7	3	16	10	5	6	5	
CHROMIUM	12	29	5	23	25	17	20	6	
IRON	51	48	32	78	81	56	47	25	
COPPER	3	7	2	5	6	6	7	5	
LEAD	3018	2285	1352	4809	5051	3736	2954	2904	
TIN	0	2	0	1	3	3	1	1	
MOLYBDENUM	0	0	0	0	0	0	0	0	
NICKEL	4	4	2	4	6	6	6	2	
MANGANESE	1	0	0	1	1	0	1	0	
SILVER	0	0	0	0	0	0	0	0	
TITANIUM	0	0	0	0	0	0	0	0	
POTASSIUM	0	1	1	1	2	0	0	1	
BORON	0	0	2	0	1	0	1	1	
SILICON	4	7	4	5	4	4	4	5	
SODIUM	1	1	2	1	2	1	1	1	
CALCIUM	0	1	1	1	0	0	0	20	
MAGNESIUM	0	0	0	0	0	0	0	1	
PHOSPHORUS	15	64	17	342	6	0	26	516	
ZINC	1	3	1	3	2	2	2	4	
BARIUM	0	0	0	0	0	0	0	0	

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	94.4	86-105	95.2	98.5	99.2	98.5	94.5
	cSt Viscosity @ 100°C	19.03	17.0-21.8	19.23	20.00	20.18	20.01	19.05
	Flashpoint in °F	515	>460	495	520	470	445	530
	Fuel %	<0.5	<1.0	<0.5	<0.5	<0.5	0.8	<0.5
	Antifreeze %	-		-	-	-	-	-
	Water %	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.4	<0.6	0.3	0.2	0.4	0.3	0.4
	TBN							
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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