



# OIL REPORT

LAB NUMBER: S119435  
 REPORT DATE: 9/26/2024  
 CODE: 20/88

UNIT ID: N542LL  
 CLIENT ID: 123990  
 PAYMENT: CC Online

<b>UNIT</b>	MAKE/MODEL: Rotax 912 UL	OIL TYPE & GRADE: Mobil 1 Racing 4T 10W/40
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 20 Hours
	ADDITIONAL INFO: Flight Design CTSW, S/N 5-647-614	

<b>CLIENT</b>	TONY CUTTER	PHONE: (530) 586-8566
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**COMMENTS** TONY: We're glad to see copper take a turn in the right direction for this Rotax. 15 ppm is just borderline high for the engine type, with any luck it will be in the normal range time (an outcome that would tell us brass/bronze parts are wearing well). Other metals remain in good shape. The only notable increase is in the form of lead and that's probably a bit of fuel blow-by. Fuel dilution was a little concerning back in 2022 but now it's cleared up based on the flashpoint and that helped the oil keep a normal viscosity. Check back next service.

<b>ELEMENTS IN PARTS PER MILLION</b>	MI/HR on Oil	20	<b>UNIT / LOCATION AVERAGES</b>	58	<b>UNIVERSAL AVERAGES</b>
	MI/HR on Unit	1,481		1,462	
	Sample Date	9/3/2024		6/25/2022	
	Make Up Oil Added				
ALUMINUM	3	3	4	3	
CHROMIUM	0	0	0	1	
IRON	10	19	21	30	
COPPER	15	16	23	6	
LEAD	31	60	7	49	
TIN	2	2	3	1	
MOLYBDENUM	13	21	48	28	
NICKEL	1	1	2	1	
MANGANESE	0	0	0	1	
SILVER	0	0	0	0	
TITANIUM	0	0	0	0	
POTASSIUM	2	2	3	1	
BORON	227	157	162	89	
SILICON	4	6	7	8	
SODIUM	4	5	8	5	
CALCIUM	1656	2311	1992	2111	
MAGNESIUM	15	17	15	395	
PHOSPHORUS	934	1157	893	1179	
ZINC	1075	1374	1087	1361	
BARIUM	1	1	1	1	

Values Should Be\*

<b>PROPERTIES</b>	SUS Viscosity @ 210°F	67.5	65-76	63.1
	cSt Viscosity @ 100°C	12.28	11.6-14.8	11.10
	Flashpoint in °F	455	>385	355
	Fuel %	<0.5	<1.0	1.5
	Antifreeze %	0.0	0.0	0.0
	Water %	0.0	<0.1	0.0
	Insolubles %	0.1	<0.6	0.1
	TBN			
	TAN			
	ISO Code			

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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