



OIL REPORT

LAB NUMBER: M85724 UNIT ID: N552PG
 REPORT DATE: 11/19/2020 CLIENT ID: 58851
 CODE: 20/68 PAYMENT: CC: Visa

UNIT	MAKE/MODEL: Continental IO-360-ES	OIL TYPE & GRADE: Aeroshell W100 (AD)
	FUEL TYPE: Gasoline (Leaded)	OIL USE INTERVAL: 56 Hours
	ADDITIONAL INFO: Cirrus SR20, S/N 1011929, 2007	

CLIENT	DAN GRASS	PHONE: (530) 273-5273
	SIERRA MOUNTAIN AVIATION INC	FAX:
	13308 NEVADA CITY AVE	ALT PHONE:
	NEVADA COUNTY AIRPORT	EMAIL: sierramtnavigation@gmail.com
	GRASS VALLEY, CA 95945	

COMMENTS
 DAN: Good report. Most of the wear metals landed at about the same levels we saw from this engine in March. Iron is a little higher, but this level still compares well to averages in terms of ppm per hour. The increase looks more like normal variation than a developing problem involving steel wear. Nickel decreased a bit to show less wear at the exhaust valve area, and while it wasn't at all bad last time, less nickel is always welcome. We had enough oil to test for fuel dilution this time; none was found. No water or excess silicon turned up, either. Looking good!

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	56	UNIT / LOCATION AVERAGES	50	59	47	UNIVERSAL AVERAGES
	MI/HR on Unit	789		727	627	2,473	
	Sample Date	11/4/2020		3/11/2020	5/1/2019	12/5/2018	
	Make Up Oil Added						
ALUMINUM	4	5	4	9	7	5	
CHROMIUM	8	6	8	2	16	7	
IRON	93	50	76	27	100	49	
COPPER	5	6	4	7	7	5	
LEAD	5093	4731	6093	2817	7069	5258	
TIN	1	1	1	1	1	1	
MOLYBDENUM	4	3	4	0	8	3	
NICKEL	11	9	15	1	26	8	
MANGANESE	1	1	1	0	1	1	
SILVER	0	0	0	0	0	0	
TITANIUM	0	0	0	0	1	0	
POTASSIUM	0	0	0	0	0	1	
BORON	0	0	0	0	1	1	
SILICON	4	8	4	9	6	7	
SODIUM	4	2	2	1	1	1	
CALCIUM	98	77	102	0	1	31	
MAGNESIUM	1	1	1	2	1	1	
PHOSPHORUS	326	379	74	40	15	458	
ZINC	5	5	6	2	6	7	
BARIUM	0	0	0	0	0	0	

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	90.9	86-105	92.1	96.0	95.9
	cSt Viscosity @ 100°C	18.20	17.0-21.8	18.49	19.41	19.40
	Flashpoint in °F	505	>460	SHORT	485	455
	Fuel %	<0.5	<1.0	-	<0.5	TR
	Antifreeze %	-		-	-	-
	Water %	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.3	<0.6	0.3	0.4	0.2
	TBN					
	TAN					
	ISO Code					

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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