



OIL REPORT

LAB NUMBER: S314096 UNIT ID: N647MD
 REPORT DATE: 11/14/2025 CLIENT ID: 27384
 CODE: 1/1,193 PAYMENT: Verbal, Bobby

UNIT	MAKE/MODEL: Continental IO-360-ES6	OIL TYPE & GRADE: Phillips XC (A/C) 20W/50
	FUEL TYPE: Gasoline (Leaded)	OIL USE INTERVAL: 46 Hours
	ADDITIONAL INFO: Cirrus SR22, S/N: 360319	

CLIENT	BOBBY WANGLER / JEAN MADSEN	PHONE: (920) 206-6383
	WISCONSIN AVIATION - WATERTOWN	FAX: (920) 206-6387
	1741 RIVER DR	ALT PHONE: (920) 261-4567
	WATERTOWN MUNI AIRPORT	EMAIL: bobbyw@wisav.com, garym@wisav.com,
	WATERTOWN, WI 53094	scott.yeager@wisconsinaviation.com,

COMMENTS BOBBY/JEAN: Silicon is still high, but it still doesn't look like it's from dirt contamination. Sure, iron is a little higher this time around, but iron tends to track directly with hours on the oil, and this was a longer oil change interval than the last one on file. On a per-hour basis, iron's actually lower than it was last time. Other wear metals are still in great shape, too, so silicon is probably something harmless like a bit of sealer. No fuel or water is evident, and the viscosity is in spec for 20W/50 oil. Looks fine overall.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	46	UNIT / LOCATION AVERAGES	20	42	48		UNIVERSAL AVERAGES
	MI/HR on Unit	934		889	876	834	583	
	Sample Date	10/28/2025		3/4/2025	10/1/2024	5/7/2024	3/3/2022	
	Make Up Oil Added					2 qts		
ALUMINUM	3	5	5	9	4	10		5
CHROMIUM	7	8	7	11	7	4		6
IRON	59	59	46	81	51	37		47
COPPER	3	3	3	2	2	1		4
LEAD	4034	3589	2662	3270	4390	534		4381
TIN	0	1	1	1	1	0		1
MOLYBDENUM	3	4	3	5	3	2		3
NICKEL	4	8	7	13	7	2		7
MANGANESE	1	1	1	1	1	1		1
SILVER	0	0	0	0	0	0		0
TITANIUM	0	0	0	1	0	0		0
POTASSIUM	0	0	0	1	0	0		1
BORON	1	1	1	0	0	1		1
SILICON	49	27	45	8	4	8		7
SODIUM	2	2	2	1	1	1		2
CALCIUM	1	2	2	1	2	5		38
MAGNESIUM	1	1	1	0	0	0		1
PHOSPHORUS	4	9	20	8	4	12		419
ZINC	5	5	5	3	5	2		5
BARIUM	0	0	0	0	0	0		0

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	95.0	86-105	87.3	95.3	93.8	88.7
	cSt Viscosity @ 100°C	19.17	17.0-21.8	17.33	19.25	18.88	17.67
	Flashpoint in °F	490	>430	470	475	435	445
	Fuel %	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5
	Antifreeze %	-		-	-	-	-
	Water %	0.0	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.4	<0.6	0.2	0.3	0.3	0.2
	TBN						
	TAN						
	ISO Code						

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

416 E. PETTIT AVE. FORT WAYNE, IN 46806 (260) 744-2380 www.blackstone-labs.com