WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

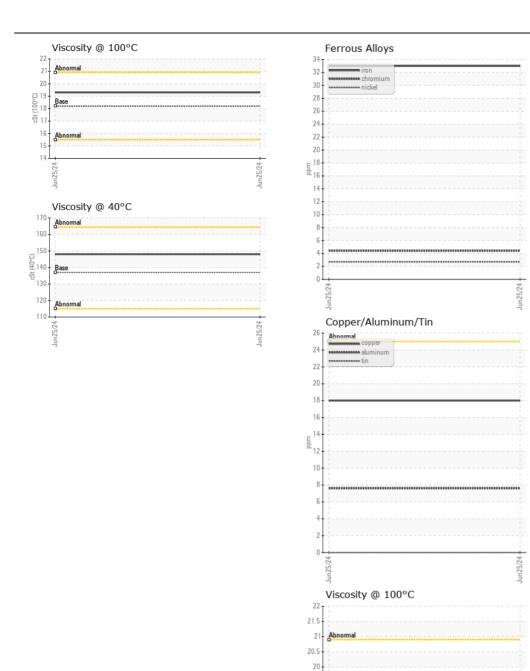
Machine Id

## [C-FAZK] PIPER PA-23-250 C-FAZK

Right Piston Aircraft Engine

SHELL AEROSHELL W 15W50 MGR (--- LTR)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0953015		
	Sample Date		Client Info		25 Jun 2024		
	TSN	hrs	Client Info		0		
	TSO	hrs	Client Info		390		
	Oil Age	hrs	Client Info		45		
	Filter Age	hrs	Client Info		45		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	>90	33		
	Chromium	ppm	ASTM D5185(m)		4		
All component wear rates are normal.	Nickel	ppm	ASTM D5185(m)		3		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)	>5	0		
	Aluminum	ppm	ASTM D5185(m)		8		
	Lead	ppm	ASTM D5185(m)	>20000	7343		
	Copper	ppm	ASTM D5185(m)		18		
	Tin	ppm	ASTM D5185(m)	>30	0		
	Vanadium	ppm	ASTM D5185(m)	7 0 0	0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
	1 Ollow Motal						
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>15	5		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1		
	Fuel		WC Method	>4.0	<1.0		
	Water		WC Method	>0.1	NEG		
	Glycol		WC Method		NEG		
	Silt	scalar	Visual*	NONE	VLITE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>0.1	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		<1		
	Boron	ppm	ASTM D5185(m)		<1		
The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)	5	0		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)	10	7		
	Calcium	ppm		10	1		
	Phosphorus	ppm	ASTM D5185(m)	1280	1028		
	Zinc	ppm	ASTM D5185(m)	10	14		
	Sulfur	ppm	ASTM D5185(m)	1800	1407		
	Visc @ 40°C	cSt	ASTM D7279(m)	137	148		
	Visc @ 100°C	cSt	ASTM D7279(m)	18.2	19.3		
	Viscosity Index (VI)	Scale	ASTM D2270*	148	148		







Laboratory Sample No. Unique Number : 5802345

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Lab Number : 02644806

: WC0953015

19.

17.

16.5 16 15.5

14.5

cSt (100°C) 18.

> Received **Tested**

Diagnosed Test Package : AVI 1 ( Additional Tests: KV40, VI )

: 02 Jul 2024

: 02 Jul 2024

: 02 Jul 2024 - Kevin Marson

Contact: Pierre maintenance@handfieldaviation.com

T: (450)462-8511

**HANDFIELD AVIATION** 

ST-HUBERT, QC

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4920 RTE DE L'AEROPORT

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.