



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**[C-FAZK] PIPER PA-23-250 C-FAZK**  
 Component  
**Right Piston Aircraft Engine**  
 Fluid  
**SHELL AEROSHELL W 15W50 MGR (--- LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0953014</b>	WC0953015	---
Sample Date		Client Info		<b>25 Jun 2024</b>	25 Jun 2024	---
TSN	hrs	Client Info		<b>0</b>	0	---
TSO	hrs	Client Info		<b>390</b>	390	---
Oil Age	hrs	Client Info		<b>45</b>	45	---
Filter Age	hrs	Client Info		<b>45</b>	45	---
Oil Changed		Client Info		<b>Changed</b>	N/A	---
Filter Changed		Client Info		<b>Changed</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	<b>22</b>	33	---
Chromium	ppm	ASTM D5185(m)	>20	<b>3</b>	4	---
Nickel	ppm	ASTM D5185(m)	>15	<b>2</b>	3	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>25	<b>8</b>	8	---
Lead	ppm	ASTM D5185(m)	>20000	<b>8125</b>	7343	---
Copper	ppm	ASTM D5185(m)	>25	<b>9</b>	18	---
Tin	ppm	ASTM D5185(m)	>30	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

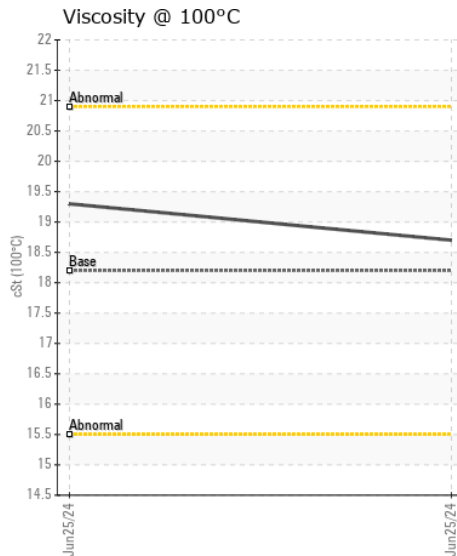
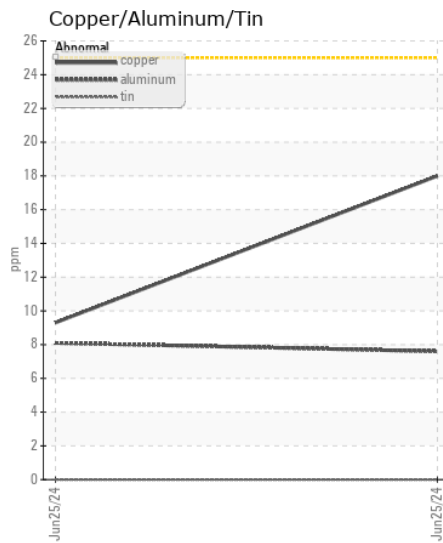
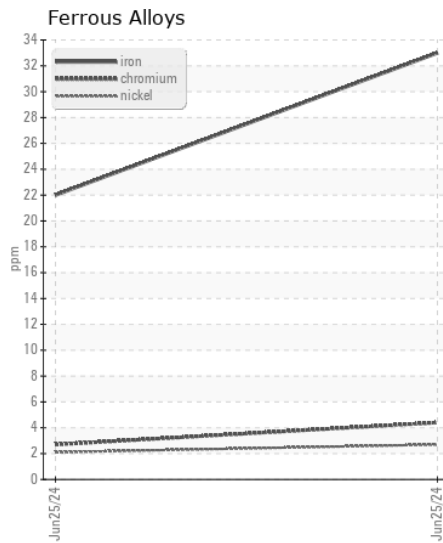
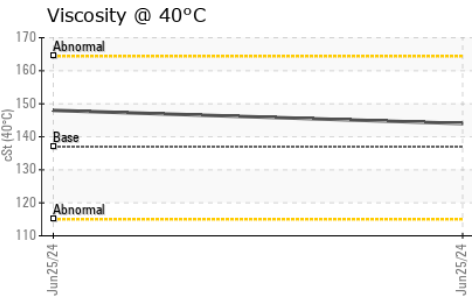
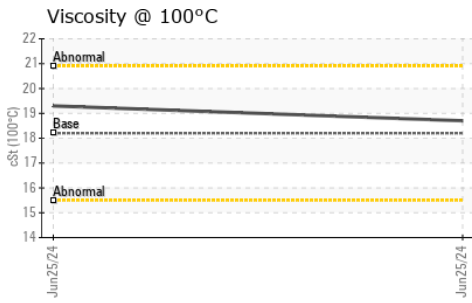
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>4</b>	5	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	---
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Silt	scalar	Visual*	NONE	<b>VLITE</b>	VLITE	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	---

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---
Boron	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	5	<b>0</b>	0	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185(m)	10	<b>10</b>	7	---
Calcium	ppm	ASTM D5185(m)	10	<b>1</b>	1	---
Phosphorus	ppm	ASTM D5185(m)	1280	<b>1078</b>	1028	---
Zinc	ppm	ASTM D5185(m)	10	<b>4</b>	14	---
Sulfur	ppm	ASTM D5185(m)	1800	<b>1423</b>	1407	---
Visc @ 40°C	cSt	ASTM D7279(m)	137	<b>144</b>	148	---
Visc @ 100°C	cSt	ASTM D7279(m)	18.2	<b>18.7</b>	19.3	---
Viscosity Index (VI)	Scale	ASTM D2270*	148	<b>146</b>	148	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0953014 **Received** : 02 Jul 2024  
**Lab Number** : **02644807** **Tested** : 02 Jul 2024  
**Unique Number** : 5802346 **Diagnosed** : 02 Jul 2024 - Kevin Marson  
**Test Package** : AVI 1 ( Additional Tests: KV40, VI )

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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.