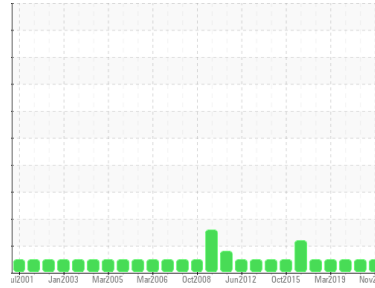




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(CGNDL)**  
Machine Id  
**[CGNDL] PIPER PA 30T L-3666-55A**  
Component  
**Right Piston Aircraft Engine**  
Fluid  
**PHILLIPS 66 AVIATION X/C OIL SAE20W50 (8 QTS)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0767820</b>	WC0626348	WC0430795
Sample Date	Client Info		<b>29 Nov 2022</b>	26 Oct 2021	27 Apr 2020
TSN	hrs	Client Info	<b>0</b>	0	0
TSO	hrs	Client Info	<b>687</b>	659	616
Oil Age	hrs	Client Info	<b>28</b>	44	43
Oil Changed		Client Info	<b>Changed</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >90	<b>12</b>	17	14
Chromium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185(m) >15	<b>6</b>	7	5
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >25	<b>4</b>	7	8
Lead	ppm	ASTM D5185(m) >20000	<b>2131</b>	3032	2679
Copper	ppm	ASTM D5185(m) >25	<b>2</b>	2	3
Tin	ppm	ASTM D5185(m) >30	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>3</b>	4	3

## ADDITIVES

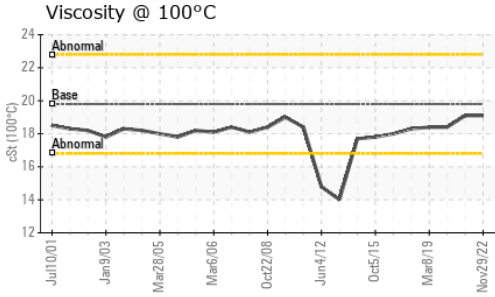
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Barium	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	<b>1</b>	2	2
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	<b>81</b>	60	65
Phosphorus	ppm	ASTM D5185(m)	<b>63</b>	38	49
Zinc	ppm	ASTM D5185(m)	<b>7</b>	8	9
Sulfur	ppm	ASTM D5185(m)	<b>1544</b>	1424	1484
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>4</b>	4	4
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	1	<1



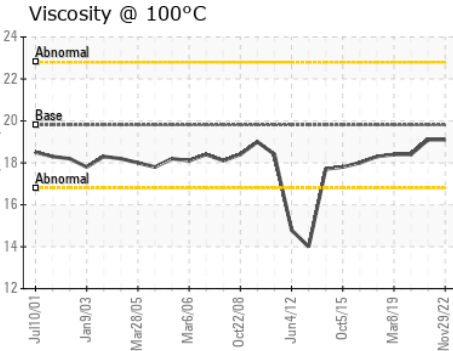
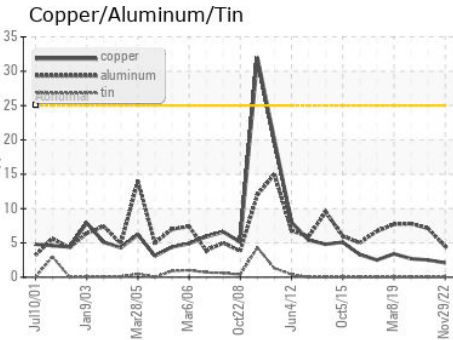
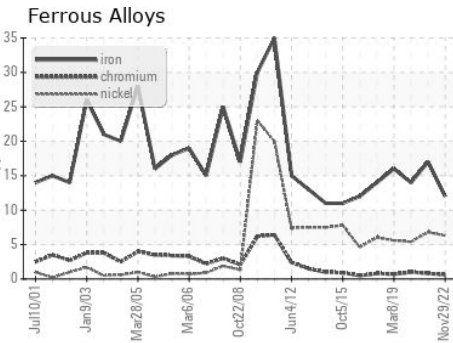
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	VLITE	LIGHT
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	19.8	<b>19.1</b>	19.1	18.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0767820 **Received** : 11 Jan 2023  
**Lab Number** : **02532543** **Diagnosed** : 11 Jan 2023  
**Unique Number** : 5513542 **Diagnostician** : Kevin Marson  
**Test Package** : AVI 1

**W.C.S. AVIATION LTD.**  
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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.