



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(C-FLWP)

Machine Id

ROBINSON L-31732-48A

Component

Rotor Piston Aircraft Engine

Fluid

PHILLIPS 66 AVIATION X/C OIL SAE20W50 (9 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0855514	WC0855511	WC0855508
Sample Date		Client Info		21 May 2024	20 Feb 2024	11 Oct 2023
TSN	hrs	Client Info		3731	3681	3628
TSO	hrs	Client Info		1534	1484	1430
Oil Age	hrs	Client Info		50	54	49
Filter Age	hrs	Client Info		50	54	49
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	10	10	10
Chromium	ppm	ASTM D5185(m)	>20	1	1	1
Nickel	ppm	ASTM D5185(m)	>15	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>5	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	3	6	3
Lead	ppm	ASTM D5185(m)	>20000	4571	4733	4908
Copper	ppm	ASTM D5185(m)	>25	2	2	3
Tin	ppm	ASTM D5185(m)	>30	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

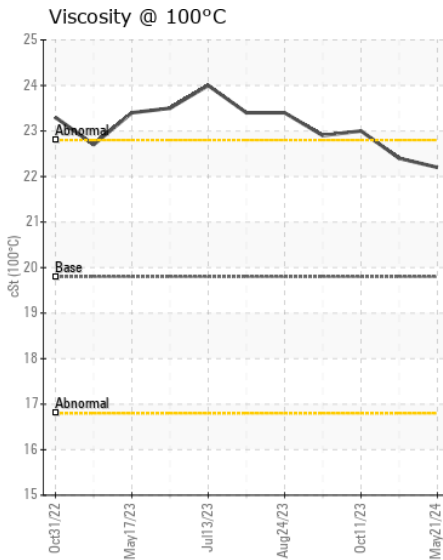
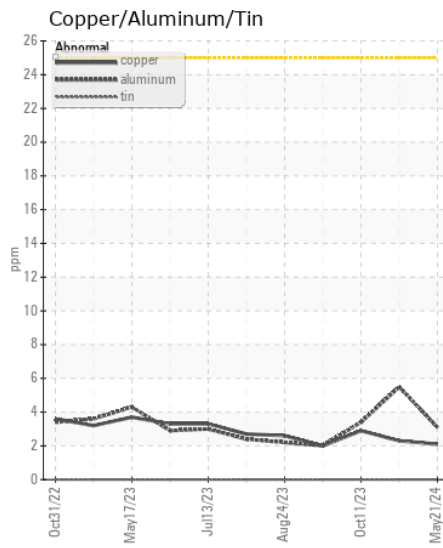
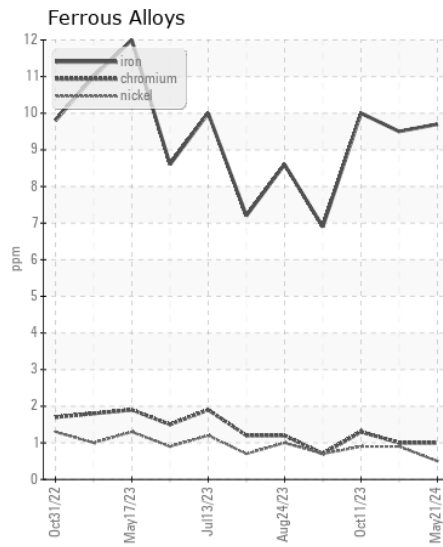
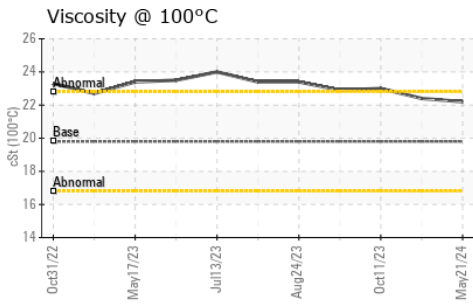
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	4	4	4
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Silt	scalar	Visual*	NONE	VLITE	VLITE	VLITE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<1	0	<1
Boron	ppm	ASTM D5185(m)		<1	0	<1
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		2	2	1
Calcium	ppm	ASTM D5185(m)		3	3	4
Phosphorus	ppm	ASTM D5185(m)		<1	0	2
Zinc	ppm	ASTM D5185(m)		4	4	4
Sulfur	ppm	ASTM D5185(m)		940	971	964
Visc @ 100°C	cSt	ASTM D7279(m)	19.8	22.2	22.4	▲ 23.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0855514
Lab Number : 02640214
Unique Number : 5789376
Test Package : AVI 1
Received : 06 Jun 2024
Tested : 06 Jun 2024
Diagnosed : 07 Jun 2024 - Kevin Marson

AOG HELISERVICES
 1032 LEN BIRCHALL WAY
 KINGSTON, ON
 CA K7M 9A1
 Contact: ROD KUCHERAN

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.

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