



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(CGIQC)

Machine Id

[CGIQC] PIPER ASTEC PA23-250 L-4586-61A

Component

Left Piston Aircraft Engine

Fluid

PHILLIPS 66 AVIATION X/C OIL SAE20W50 (12 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0921437	WC0820319	WC0820333
Sample Date		Client Info		08 May 2024	27 Jul 2023	13 Jun 2023
TSN	hrs	Client Info		0	0	0
TSO	hrs	Client Info		2336	2177	2129
Oil Age	hrs	Client Info		45	48	38
Filter Age	hrs	Client Info		45	48	38
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	26	23	19
Chromium	ppm	ASTM D5185(m)	>20	4	4	3
Nickel	ppm	ASTM D5185(m)	>15	4	4	4
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>5	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	5	4	3
Lead	ppm	ASTM D5185(m)	>20000	6238	5876	4634
Copper	ppm	ASTM D5185(m)	>25	3	3	2
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

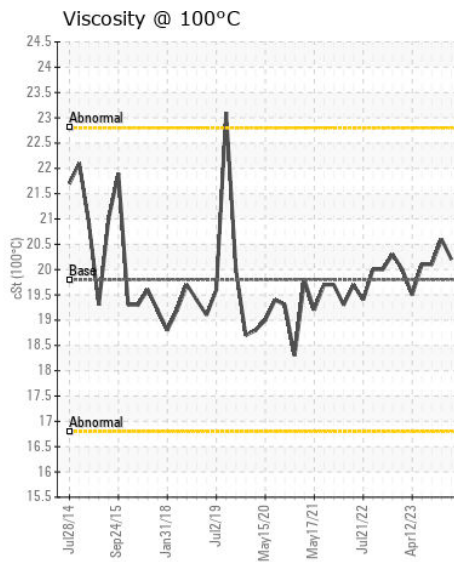
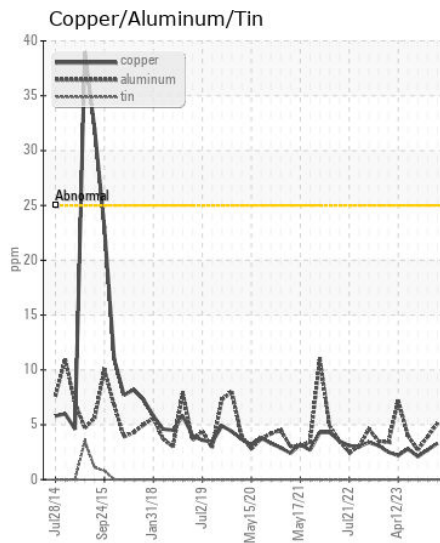
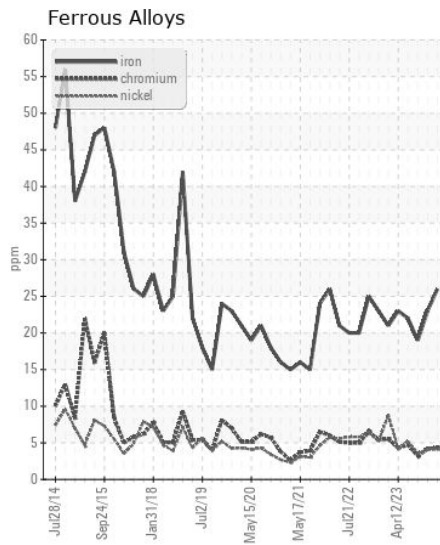
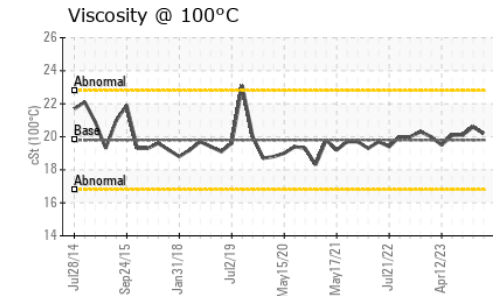
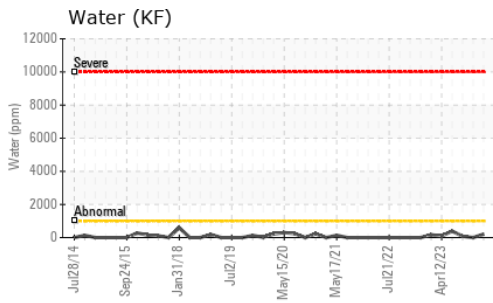
The water content is negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<1	4	5
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water	%	ASTM D6304*	>0.1	0.020	---	0.007
ppm Water	ppm	ASTM D6304*	>1000	206	---	75.9
Glycol		WC Method		NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	WGOIL
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	.2%	NEG	.2%

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Boron	ppm	ASTM D5185(m)		0	0	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		3	2	2
Calcium	ppm	ASTM D5185(m)		<1	<1	0
Phosphorus	ppm	ASTM D5185(m)		0	<1	0
Zinc	ppm	ASTM D5185(m)		2	3	1
Sulfur	ppm	ASTM D5185(m)		895	1119	1186
Visc @ 100°C	cSt	ASTM D7279(m)	19.8	20.2	20.6	20.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0921437
Lab Number : 02634540
Unique Number : 5775693
Test Package : AVI 1 (Additional Tests: KF)

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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.