



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(C-FITZ)

Machine Id

[C-FITZ] CIRRUS SR22T 1036107

Component

Front Piston Aircraft Engine

Fluid

SHELL AEROSHELL W 15W50 MGR (8 LTR)

RECOMMENDATION

We advise that you check the engine tuning and timing. We advise that you check for excessive valve and valve guide clearance. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0821895	WC0821897	---
Sample Date		Client Info		03 Apr 2024	29 Jan 2024	---
TSN	hrs	Client Info		784	756	---
TSO	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		28	41	---
Filter Age	hrs	Client Info		28	41	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

Nickel ppm levels are abnormal. Exhaust valve wear is indicated.

Iron	ppm	ASTM D5185(m)	>90	75	111	---
Chromium	ppm	ASTM D5185(m)	>20	34	▲ 47	---
Nickel	ppm	ASTM D5185(m)	>15	▲ 44	▲ 56	---
Titanium	ppm	ASTM D5185(m)		1	<1	---
Silver	ppm	ASTM D5185(m)	>5	0	0	---
Aluminum	ppm	ASTM D5185(m)	>25	11	17	---
Lead	ppm	ASTM D5185(m)	>20000	7680	9435	---
Copper	ppm	ASTM D5185(m)	>25	34	▲ 54	---
Tin	ppm	ASTM D5185(m)	>30	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

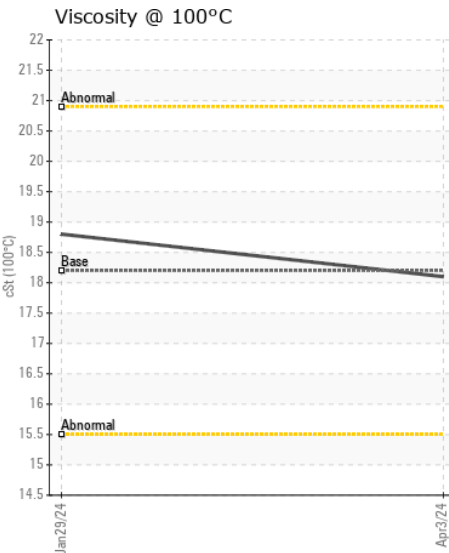
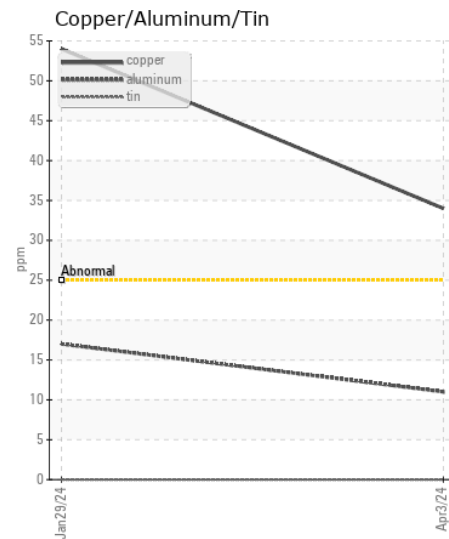
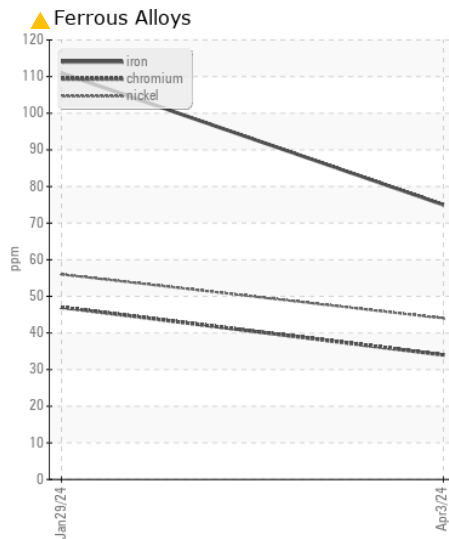
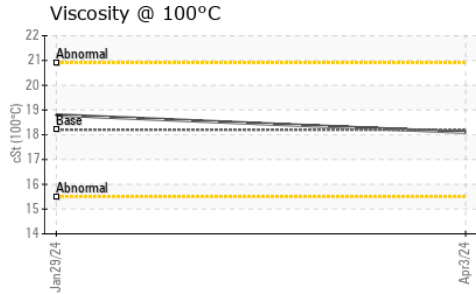
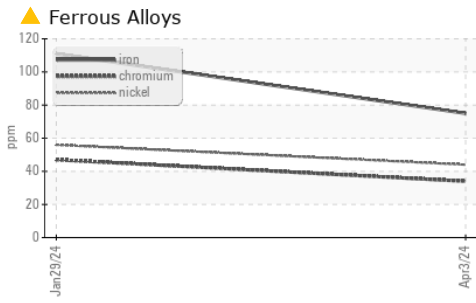
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	8	13	---
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	---
Fuel		WC Method	>4.0	<1.0	<1.0	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Silt	scalar	Visual*	NONE	VLITE	VLITE	---
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	---

FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		<1	<1	---
Boron	ppm	ASTM D5185(m)		<1	<1	---
Barium	ppm	ASTM D5185(m)		0	0	---
Molybdenum	ppm	ASTM D5185(m)	5	9	18	---
Manganese	ppm	ASTM D5185(m)		0	0	---
Magnesium	ppm	ASTM D5185(m)	10	2	2	---
Calcium	ppm	ASTM D5185(m)	10	4	4	---
Phosphorus	ppm	ASTM D5185(m)	1280	1090	1004	---
Zinc	ppm	ASTM D5185(m)	10	8	8	---
Sulfur	ppm	ASTM D5185(m)	1800	1430	1420	---
Visc @ 100°C	cSt	ASTM D7279(m)	18.2	18.1	18.8	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0821895
Lab Number : 02627685
Unique Number : 5760817
Test Package : AVI 1

Received : 09 Apr 2024
Tested : 09 Apr 2024
Diagnosed : 09 Apr 2024 - Kevin Marson

HANDFIELD AVIATION
 4920 RTE DE L' AEROPORT
 ST-HUBERT, QC
 CA J3Y 8Y9
 Contact: Pierre
 maintenance@handfieldaviation.com
 T: (450)462-8511
 F:

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.