



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(C-GMNJ)

Machine Id

[C-GMNJ] CIRRUS SR22 917294

Component

Piston Aircraft Engine

Fluid

SHELL AEROSHELL W 15W50 MGR (6 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		WC0921445	WC0841053	---
Sample Date		Client Info		30 Apr 2024	18 Sep 2023	---
TSN	hrs	Client Info		1384	1360	---
TSO	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		24	43	---
Filter Age	hrs	Client Info		24	43	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

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

PQ		ASTM D8184*		0	---	---
Iron	ppm	ASTM D5185(m)	>90	134	68	---
Chromium	ppm	ASTM D5185(m)	>20	23	14	---
Nickel	ppm	ASTM D5185(m)	>15	▲ 32	15	---
Titanium	ppm	ASTM D5185(m)		<1	<1	---
Silver	ppm	ASTM D5185(m)	>5	0	0	---
Aluminum	ppm	ASTM D5185(m)	>25	19	11	---
Lead	ppm	ASTM D5185(m)	>20000	6048	5989	---
Copper	ppm	ASTM D5185(m)	>25	10	7	---
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

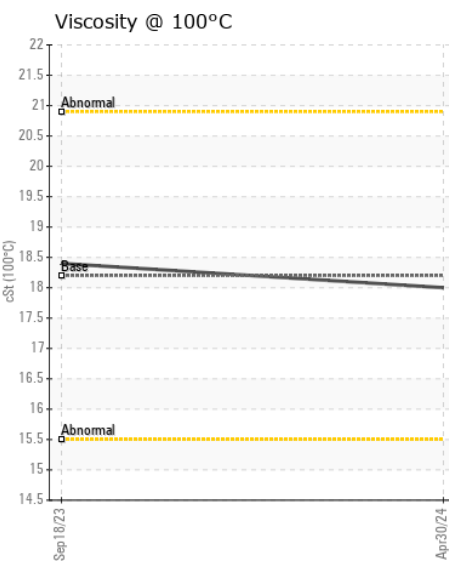
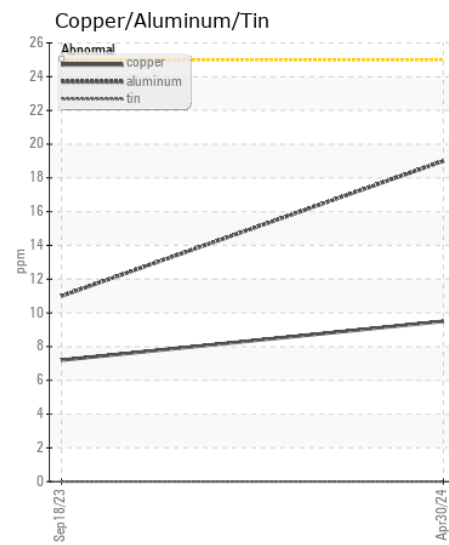
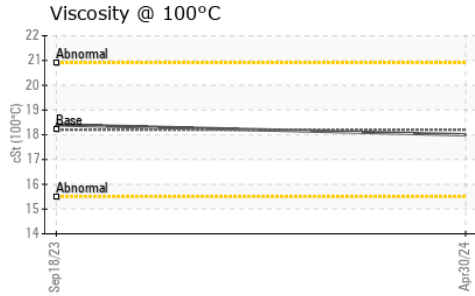
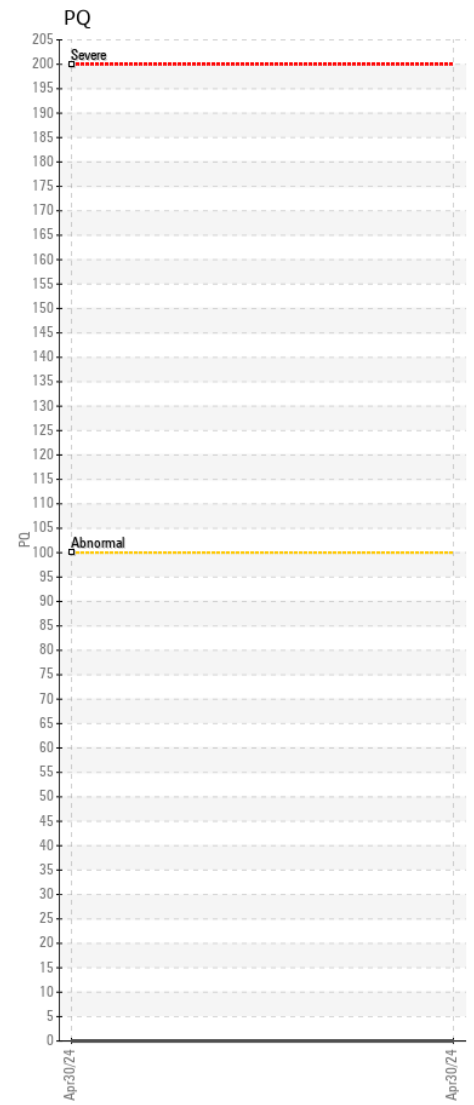
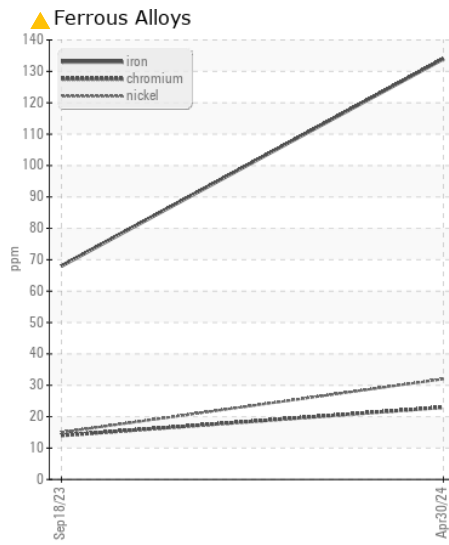
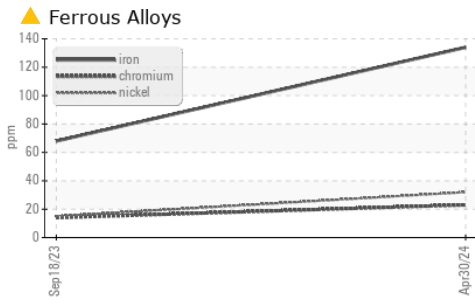
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	5	5	---
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	NONE	---
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	.2%	---

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	0	---
Barium	ppm	ASTM D5185(m)		0	0	---
Molybdenum	ppm	ASTM D5185(m)	5	8	5	---
Manganese	ppm	ASTM D5185(m)		0	0	---
Magnesium	ppm	ASTM D5185(m)	10	1	<1	---
Calcium	ppm	ASTM D5185(m)	10	63	8	---
Phosphorus	ppm	ASTM D5185(m)	1280	1026	989	---
Zinc	ppm	ASTM D5185(m)	10	6	6	---
Sulfur	ppm	ASTM D5185(m)	1800	1648	1176	---
Visc @ 100°C	cSt	ASTM D7279(m)	18.2	18.0	18.4	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0921445
Lab Number : 02633097
Unique Number : 5774250
Test Package : AVI 1 (Additional Tests: PQ)
Received : 03 May 2024
Tested : 03 May 2024
Diagnosed : 03 May 2024 - Kevin Marson

CORPORATE AIRCRAFT RESTORATIONS
 481 AVIATOR LANE
 OSHAWA, ON
 CA L1J 0B8
 Contact: Dave Douglas
 hanger@bellnet.ca
 T: (905)434-5173
 F: (905)983-9599

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.