

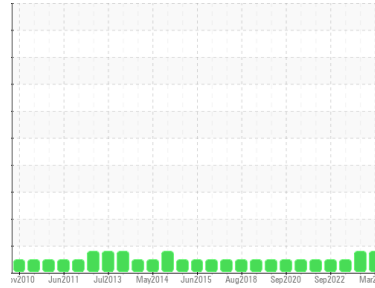


OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Area
(C-GODZ)
 Machine Id
[C-GODZ] COMMANDER 114B L-26525-48A
 Component
Piston Aircraft Engine
 Fluid
SHELL AEROSHELL W 15W50 MGR (8 LTR)



DIAGNOSIS

Recommendation

We advise that you monitor for an abnormal oil pressure drop and noise. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

Copper ppm levels are abnormal. Bearing and/or bushing wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0869631	WC0869630	WC0740375
Sample Date	Client Info		21 Mar 2024	12 Oct 2023	02 May 2023
TSN	hrs	Client Info	2000	197504	1903
TSO	hrs	Client Info	2000	1975	1903
Oil Age	hrs	Client Info	25	44	30
Oil Changed		Client Info	Changed	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>90	24	32	23
Chromium	ppm	ASTM D5185(m)	>20	2	2	1
Nickel	ppm	ASTM D5185(m)	>15	4	4	2
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>5	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	5	7	4
Lead	ppm	ASTM D5185(m)	>20000	4406	5017	4122
Copper	ppm	ASTM D5185(m)	>25	▲ 37	▲ 42	21
Tin	ppm	ASTM D5185(m)	>30	0	<1	0
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		<1	2	2

ADDITIVES

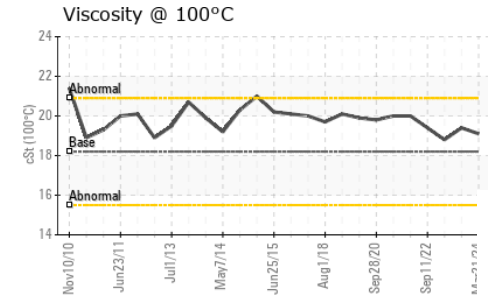
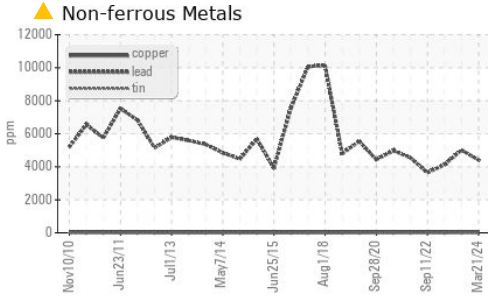
	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		<1	<1	<1
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)	5	<1	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	10	24	21	22
Calcium	ppm	ASTM D5185(m)	10	5	4	<1
Phosphorus	ppm	ASTM D5185(m)	1280	1152	1221	1316
Zinc	ppm	ASTM D5185(m)	10	13	17	12
Sulfur	ppm	ASTM D5185(m)	1800	1331	1307	1150
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	3	4	2
Sodium	ppm	ASTM D5185(m)		<1	3	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1



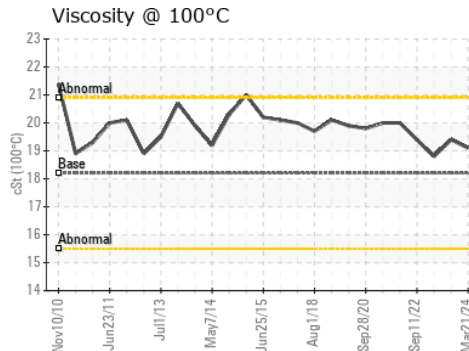
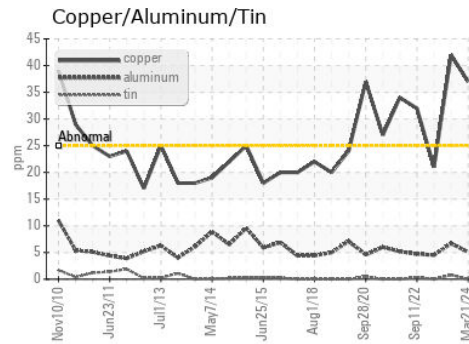
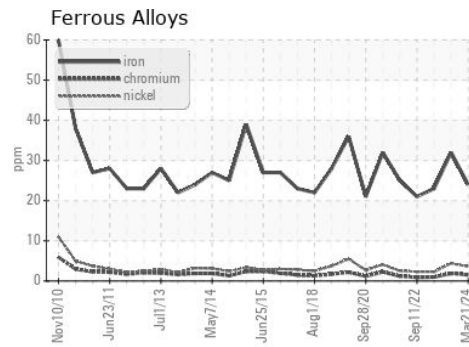
OIL ANALYSIS REPORT



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	VLITE	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)	18.2	19.1	19.4

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0869631
Lab Number : 02625674
Unique Number : 5750793
Test Package : AVI 1

2239351 ONTARIO INC
 3-1136 CENTRE STREET SUIT # 252
 THORNHILL, ON
 CA L4J 3M8
 Contact: Phil Lightstone
 plight@rogers.com
 T: (416)578-7445
 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.