



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Area
(C-GGMV)
Machine Id
[C-GGMV] DIAMOND DA 20-C1 806240
Component
Piston Aircraft Engine
Fluid
SHELL AEROSHELL W 80 (6 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0918431	WC0918424	WC0901554
Sample Date		Client Info		23 Apr 2024	13 Mar 2024	07 Feb 2024
TSN	hrs	Client Info		0	0	0
TSO	hrs	Client Info		1767	1723	1668
Oil Age	hrs	Client Info		44	54	31
Filter Age	hrs	Client Info		34	54	31
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	8	14	15
Chromium	ppm	ASTM D5185(m)	>20	2	2	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	0
Aluminum	ppm	ASTM D5185(m)	>25	2	3	6
Lead	ppm	ASTM D5185(m)	>20000	3362	5624	3645
Copper	ppm	ASTM D5185(m)	>25	1	2	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

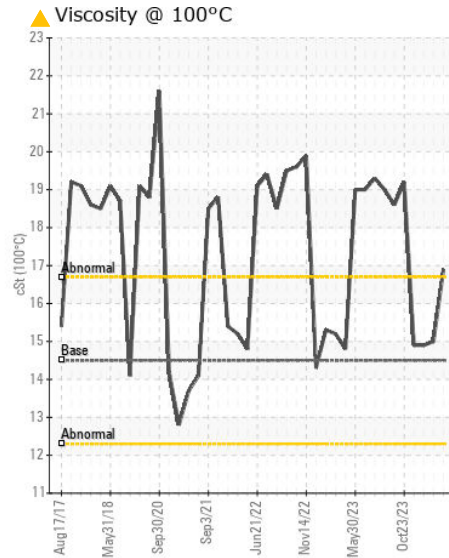
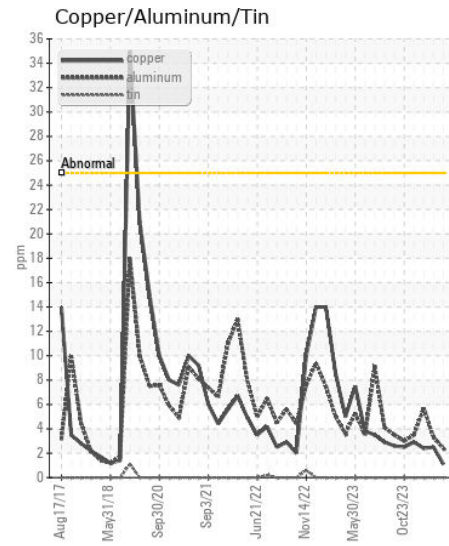
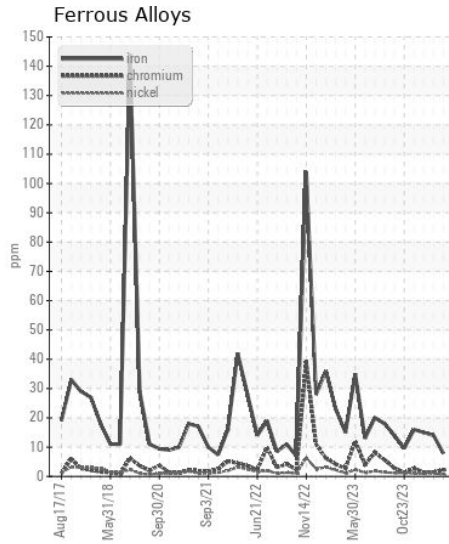
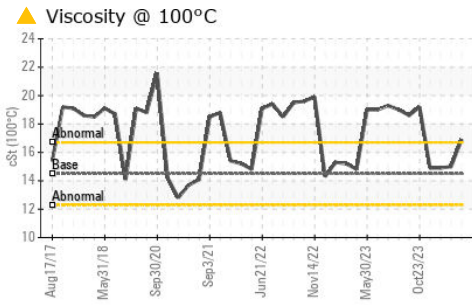
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	2	5	5
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
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

Viscosity of sample indicates oil is within SAE 50 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		0	<1	1
Boron	ppm	ASTM D5185(m)		<1	<1	0
Barium	ppm	ASTM D5185(m)		<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)		<1	0	<1
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		<1	<1	<1
Calcium	ppm	ASTM D5185(m)		2	1	1
Phosphorus	ppm	ASTM D5185(m)		307	1010	1081
Zinc	ppm	ASTM D5185(m)		4	4	6
Sulfur	ppm	ASTM D5185(m)	3000	3851	2176	2280
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	▲ 16.9	15.0	14.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0918431
Lab Number : 02638438
Unique Number : 5787600
Test Package : AVI 1
Received : 29 May 2024
Tested : 30 May 2024
Diagnosed : 30 May 2024 - Kevin Marson

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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.