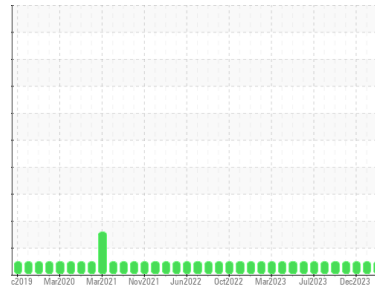




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

(C-FECP)

Machine Id

[C-FECP] DIAMOND DA20 650000

Component

Piston Aircraft Engine

Fluid

SHELL AEROSHELL W 80 (6 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0918425	WC0901553	WC0882493
Sample Date	Client Info		14 Mar 2024	09 Feb 2024	19 Dec 2023
TSN	hrs	Client Info	0	0	0
TSO	hrs	Client Info	2103	2038	2008
Oil Age	hrs	Client Info	65	31	60
Oil Changed		Client Info	Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	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	36	38	78
Chromium	ppm	ASTM D5185(m)	>20	6	5	14
Nickel	ppm	ASTM D5185(m)	>15	2	2	4
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>5	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	9	4	7
Lead	ppm	ASTM D5185(m)	>20000	5888	4117	6432
Copper	ppm	ASTM D5185(m)	>25	11	5	8
Tin	ppm	ASTM D5185(m)	>30	0	0	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)		2	2	2

ADDITIVES

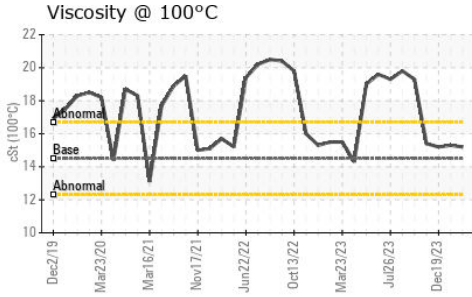
	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		<1	0	<1
Barium	ppm	ASTM D5185(m)		<1	<1	<1
Molybdenum	ppm	ASTM D5185(m)		7	2	6
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		<1	<1	2
Calcium	ppm	ASTM D5185(m)		9	2	5
Phosphorus	ppm	ASTM D5185(m)		1012	1092	1085
Zinc	ppm	ASTM D5185(m)		11	6	7
Sulfur	ppm	ASTM D5185(m)	3000	2155	2246	2314
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	11	6	11
Sodium	ppm	ASTM D5185(m)		1	1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	8



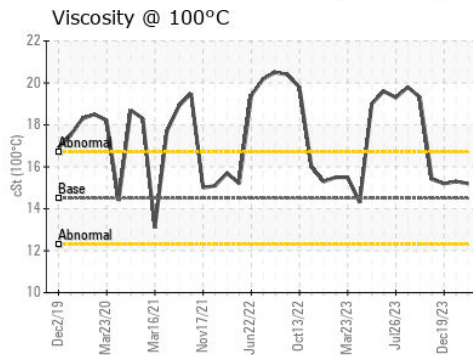
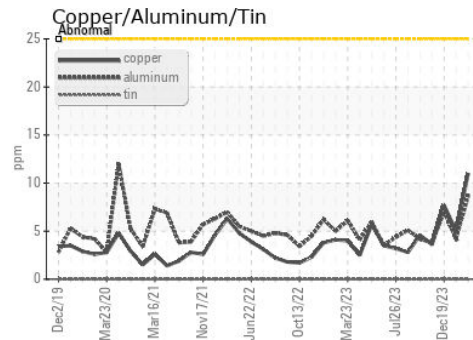
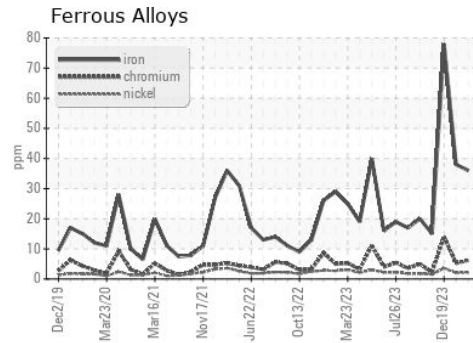
OIL ANALYSIS REPORT



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	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%
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	15.2	15.3	15.2

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0918425
Lab Number : **02629188**
Unique Number : 5762320
Test Package : AVI 1
Received : 16 Apr 2024
Tested : 17 Apr 2024
Diagnosed : 17 Apr 2024 - Kevin Marson

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 WINDSOR, ON
 CA N8V 1A1
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 james@wcsaviation.com
 T: (519)972-7271
 F: (519)972-8355

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.