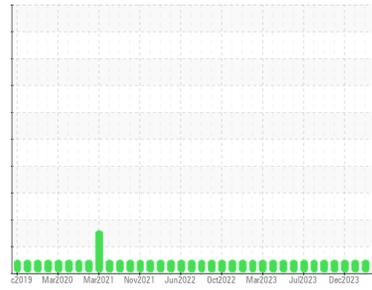




# OIL ANALYSIS REPORT

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		<b>WC0918429</b>	WC0918425	WC0901553
Sample Date	Client Info		<b>10 Apr 2024</b>	14 Mar 2024	09 Feb 2024
TSN	hrs	Client Info	<b>0</b>	0	0
TSO	hrs	Client Info	<b>2156</b>	2103	2038
Oil Age	hrs	Client Info	<b>53</b>	65	31
Oil Changed		Client Info	<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>90	<b>22</b>	36	38
Chromium	ppm	ASTM D5185(m)	>20	<b>6</b>	6	5
Nickel	ppm	ASTM D5185(m)	>15	<b>2</b>	2	2
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>6</b>	9	4
Lead	ppm	ASTM D5185(m)	>20000	<b>5529</b>	5888	4117
Copper	ppm	ASTM D5185(m)	>25	<b>6</b>	11	5
Tin	ppm	ASTM D5185(m)	>30	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	2

## ADDITIVES

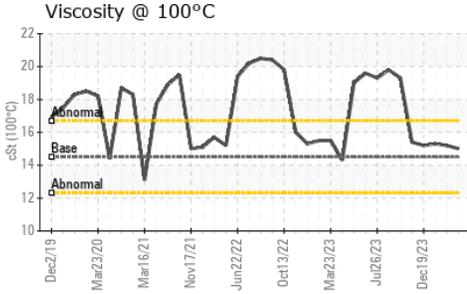
	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)		<b>2</b>	7	2
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m)		<b>2</b>	9	2
Phosphorus	ppm	ASTM D5185(m)		<b>943</b>	1012	1092
Zinc	ppm	ASTM D5185(m)		<b>5</b>	11	6
Sulfur	ppm	ASTM D5185(m)	3000	<b>2460</b>	2155	2246
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	<b>7</b>	11	6
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	1
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1



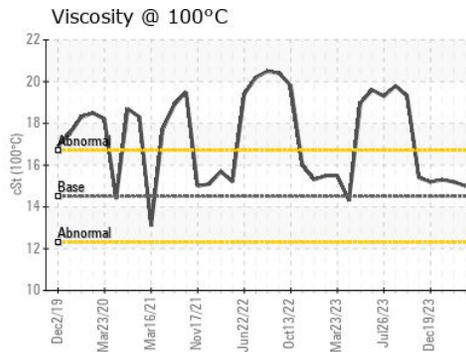
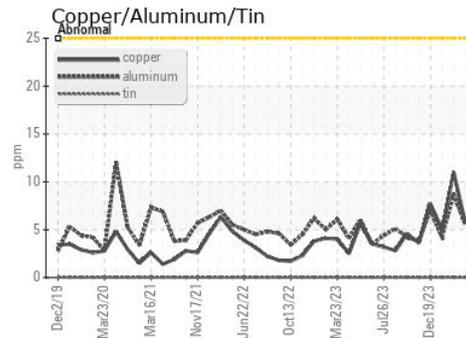
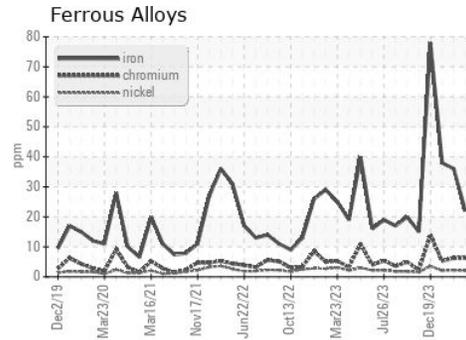
# OIL ANALYSIS REPORT



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	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
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	<b>15.0</b>	15.2	15.3

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0918429  
**Lab Number** : **02629190**  
**Unique Number** : 5762322  
**Test Package** : AVI 1  
**Received** : 16 Apr 2024  
**Tested** : 17 Apr 2024  
**Diagnosed** : 17 Apr 2024 - Kevin Marson

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.

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