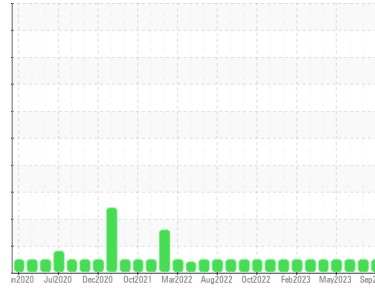




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(C-GDME)**  
Machine Id  
**[C-GDME] DIAMOND DA20 806487**  
Component  
**Piston Aircraft Engine**  
Fluid  
**SHELL AEROSHELL OIL W 100 PLUS (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>WC0828151</b>	WC0828154	WC0816785
Sample Date	Client Info	<b>20 Sep 2023</b>	15 Aug 2023	29 May 2023
TSN	hrs Client Info	<b>0</b>	0	0
TSO	hrs Client Info	<b>1802</b>	1752	16559
Oil Age	hrs Client Info	<b>51</b>	24	57
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
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >90	<b>20</b>	16	26
Chromium	ppm ASTM D5185(m) >20	<b>5</b>	5	6
Nickel	ppm ASTM D5185(m) >15	<b>2</b>	1	3
Titanium	ppm ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm ASTM D5185(m) >5	<b>&lt;1</b>	0	0
Aluminum	ppm ASTM D5185(m) >25	<b>6</b>	4	4
Lead	ppm ASTM D5185(m) >20000	<b>6034</b>	2778	7257
Copper	ppm ASTM D5185(m) >25	<b>4</b>	4	4
Tin	ppm ASTM D5185(m) >30	<b>0</b>	0	0
Antimony	ppm ASTM D5185(m)	<b>0</b>	0	<1
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>0</b>	0	0

## ADDITIVES

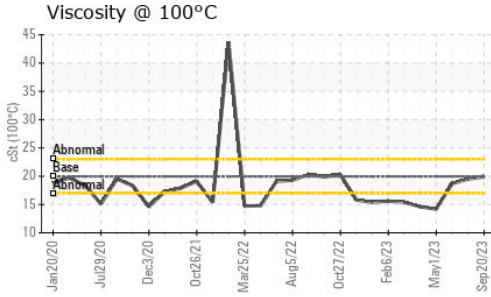
method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Barium	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m)	<b>2</b>	2	4
Manganese	ppm ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm ASTM D5185(m) 0	<b>0</b>	0	<1
Calcium	ppm ASTM D5185(m) 0	<b>2</b>	2	<1
Phosphorus	ppm ASTM D5185(m)	<b>1179</b>	1049	1260
Zinc	ppm ASTM D5185(m) 0	<b>7</b>	7	5
Sulfur	ppm ASTM D5185(m) 2600	<b>2515</b>	2450	3032
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>10</b>	8	6
Sodium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Potassium	ppm ASTM D5185(m) >20	<b>0</b>	<1	<1



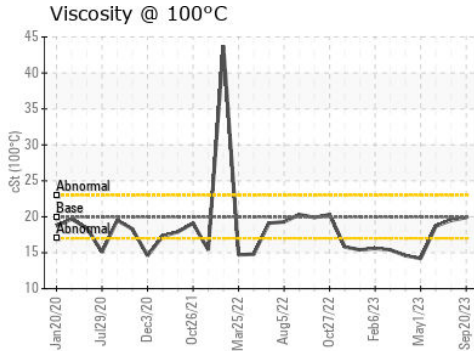
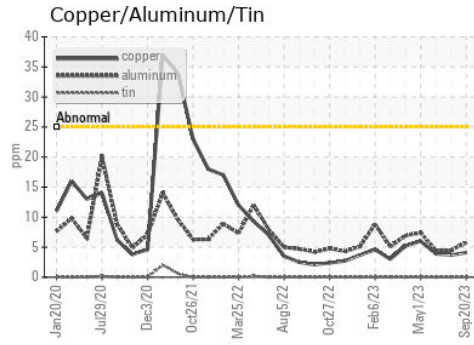
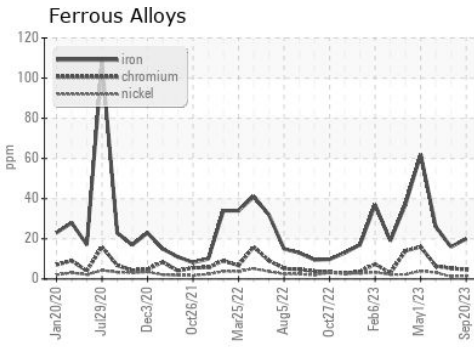
# OIL ANALYSIS REPORT



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	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	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	19.96	<b>19.9</b>	19.5	18.7

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0828151      **Received** : 06 Oct 2023  
**Lab Number** : **02587571**      **Diagnosed** : 06 Oct 2023  
**Unique Number** : 5656637      **Diagnostician** : Kevin Marson  
**Test Package** : AVI 1

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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