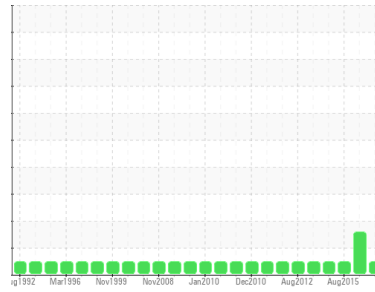




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**(C-GVRA)**

Machine Id

**AVRO LANCASTER**

Component

**2 Piston Aircraft Engine**

Fluid

**SHELL AEROSHELL W 120 (30 GAL)**

## 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>WC0886514</b>	WC0585912	WC916737
Sample Date	Client Info		<b>06 Jul 2024</b>	17 Nov 2021	04 Aug 2015
TSN	hrs	Client Info	<b>0</b>	150	0
TSO	hrs	Client Info	<b>226</b>	150	0
Oil Age	hrs	Client Info	<b>24</b>	26	25
Oil Changed		Client Info	<b>Changed</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	ABNORMAL	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>32</b>	20	10
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>15	<b>1</b>	2	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>13</b>	13	3
Lead	ppm	ASTM D5185(m)	>20000	<b>1251</b>	811	783
Copper	ppm	ASTM D5185(m)	>25	<b>14</b>	17	9
Tin	ppm	ASTM D5185(m)	>30	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	<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>2</b>	1	<1

## ADDITIVES

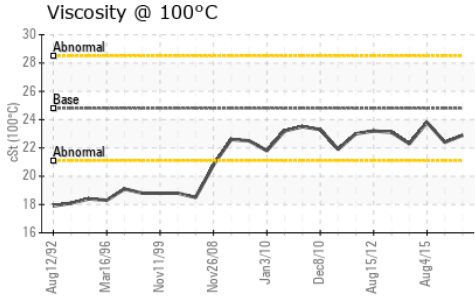
	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	0
Molybdenum	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>2</b>	<1	0
Calcium	ppm	ASTM D5185(m)		<b>28</b>	3	3
Phosphorus	ppm	ASTM D5185(m)		<b>3</b>	2	2
Zinc	ppm	ASTM D5185(m)		<b>4</b>	2	2
Sulfur	ppm	ASTM D5185(m)	5100	<b>3950</b>	3685	6190
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>13</b>	▲ 23	9
Sodium	ppm	ASTM D5185(m)		<b>1</b>	1	0
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	0



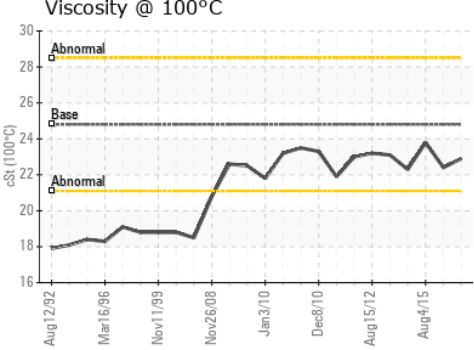
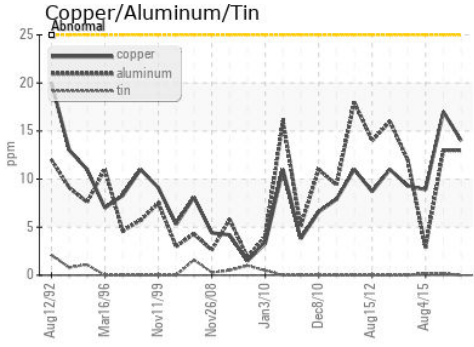
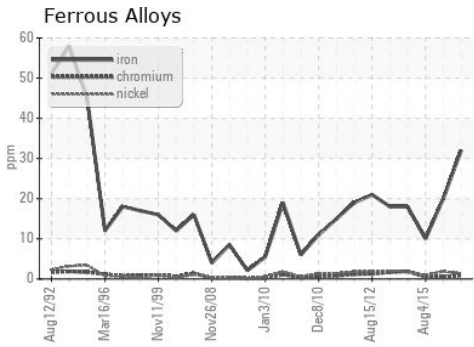
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	<b>LIGHT</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>VLITE</b>	VLITE	LIGHT
Debris	scalar	Visual*	NONE	<b>NONE</b>	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	24.8	<b>22.9</b>	22.4	23.8

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0886514  
**Lab Number** : 02647997  
**Unique Number** : 5813549  
**Test Package** : AVI 1

**CANADIAN WARPLANE HERITAGE**  
 9280 AIRPORT ROAD, HAMILTON AIRPORT  
 MOUNT HOPE, ON  
 CA L0R 1W0  
 Contact: Jim Van Dyk  
 jvandyk@warplane.com  
 T: (905)679-4183  
 F: (905)679-4186

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.