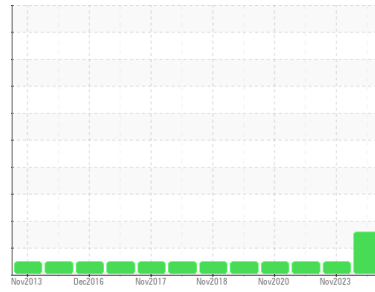




OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Area

(C-GVRA)

Machine Id

AVRO LANCASTER

Component

4 Piston Aircraft Engine

Fluid

SHELL AEROSHELL W 120 (30 GAL)

DIAGNOSIS

Recommendation

We advise that you check the efficiency of the lube oil purifier. We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate concentration of dirt present in the oil.

Fluid Condition

The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0886512	WC0737258	WC0585910
Sample Date	Client Info		06 Jul 2024	25 Nov 2023	17 Nov 2021
TSN	hrs	Client Info	0	49	458
TSO	hrs	Client Info	75	49	458
Oil Age	hrs	Client Info	24	49	26
Oil Changed		Client Info	Changed	Changed	Changed
Sample Status			ABNORMAL	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	17	25	10
Chromium	ppm	ASTM D5185(m)	>20	6	12	1
Nickel	ppm	ASTM D5185(m)	>15	2	2	2
Titanium	ppm	ASTM D5185(m)		<1	0	0
Silver	ppm	ASTM D5185(m)	>5	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	14	16	8
Lead	ppm	ASTM D5185(m)	>20000	1275	2034	1301
Copper	ppm	ASTM D5185(m)	>25	11	17	11
Tin	ppm	ASTM D5185(m)	>30	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	<1
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	<1	<1
Barium	ppm	ASTM D5185(m)		<1	<1	0
Molybdenum	ppm	ASTM D5185(m)		1	<1	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		5	2	<1
Calcium	ppm	ASTM D5185(m)		5	20	2
Phosphorus	ppm	ASTM D5185(m)		3	4	2
Zinc	ppm	ASTM D5185(m)		3	8	2
Sulfur	ppm	ASTM D5185(m)	5100	3998	3008	3994
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

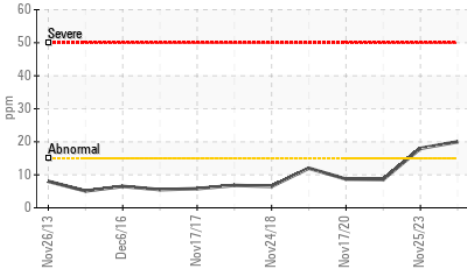
CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	▲ 20	18	9
Sodium	ppm	ASTM D5185(m)		3	1	0
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1

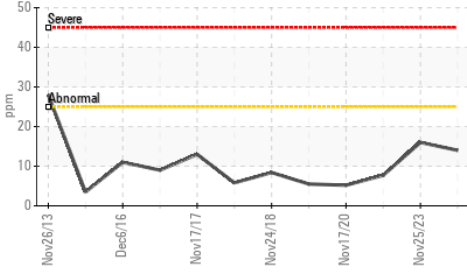


OIL ANALYSIS REPORT

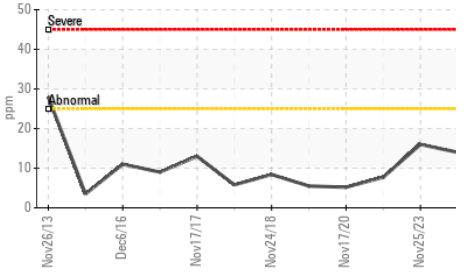
▲ Silicon (ppm)



Aluminum (ppm)



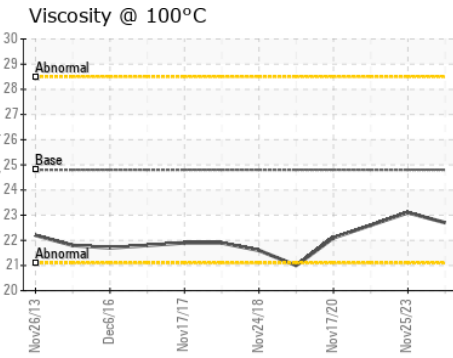
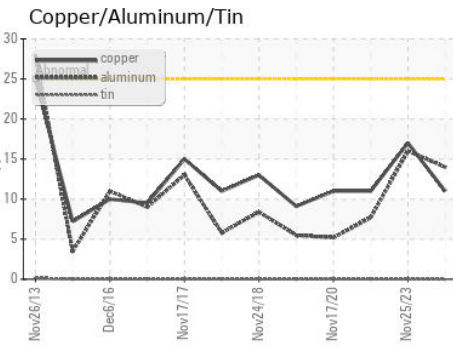
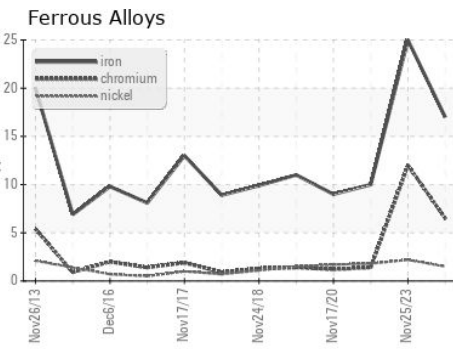
Aluminum (ppm)



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	VLITE	NONE	VLITE
Debris	scalar	Visual*	NONE	NONE	VLITE	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
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	24.8	22.7	23.1	22.6

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0886512
Lab Number : **02647998**
Unique Number : 5813550
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.