

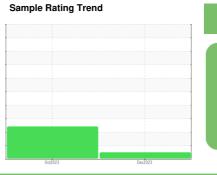
OIL ANALYSIS REPORT

(C-FHLL) Machine Id LAKE L19790-51A

Component

Piston Aircraft Engine

SHELL AEROSHELL W 15W50 MGR (7 LTR)





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

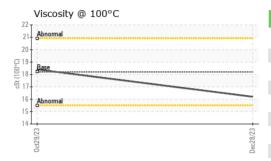
Fluid Condition

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

D)							
R)			0ct2023	Dec2023			
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		WC0877817	WC0877816		
Sample Date		Client Info		28 Dec 2023	29 Oct 2023		
TSN	hrs	Client Info		1198	1208		
TSO	hrs	Client Info		1198	1205		
Oil Age	hrs	Client Info		10	15		
Oil Changed		Client Info		Changed	Changed		
Sample Status				NORMAL	ABNORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2	
Fuel		WC Method	>4.0	<1.0	<1.0		
Water		WC Method	>0.1	NEG	NEG		
Glycol		WC Method		NEG	NEG		
WEAR METALS		method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>90	30	40		
Chromium	ppm	ASTM D5185(m)	>20	<1	<1		
Nickel	ppm	ASTM D5185(m)	>15	10	<u> </u>		
Titanium	ppm	ASTM D5185(m)		0	0		
Silver	ppm	ASTM D5185(m)	>5	0	<1		
Aluminum	ppm	ASTM D5185(m)	>25	8	11		
Lead	ppm	ASTM D5185(m)	>20000	1883	3314		
Copper	ppm	ASTM D5185(m)	>25	7	19		
Tin	ppm	ASTM D5185(m)	>30	0	<1		
Antimony	ppm	ASTM D5185(m)		0	0		
Vanadium	ppm	ASTM D5185(m)		0	0		
Beryllium	ppm	ASTM D5185(m)		0	0		
Cadmium	ppm	ASTM D5185(m)		2	6		
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		<1	0		
Barium	ppm	ASTM D5185(m)		<1	4		
Molybdenum	ppm	ASTM D5185(m)	5	0	0		
Manganese	ppm	ASTM D5185(m)		0	0		
Magnesium	ppm	ASTM D5185(m)	10	2	1		
Calcium	ppm	ASTM D5185(m)	10	4	3		
Phosphorus	ppm	ASTM D5185(m)	1280	1232	1162		
Zinc	ppm	ASTM D5185(m)	10	5	8		
Sulfur	ppm	ASTM D5185(m)	1800	1526	1722		
Lithium	ppm	ASTM D5185(m)		<1	<1		
CONTAMINANTS method limit/base current history1 history2							
Silicon	ppm	ASTM D5185(m)	>15	7	<u> </u>		
Sodium	ppm	ASTM D5185(m)		<1	1		
Potassium	ppm	ASTM D5185(m)	>20	<1	0		



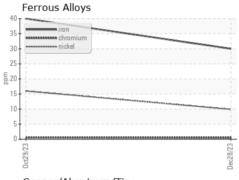
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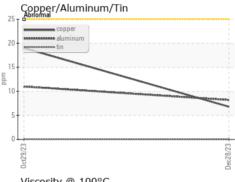


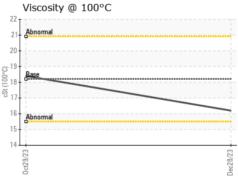
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
Precipitate	scalar	Visual*	NONE	NONE	NONE	
Silt	scalar	Visual*	NONE	NONE	NONE	
Debris	scalar	Visual*	NONE	NONE	NONE	
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
Appearance	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	
FILLID DDODEDT						

FLUID PROPER	THES	method	ilmivbase		nistory i	nistory2
Visc @ 100°C	cSt	ASTM D7279(m)	18.2	16.2	18.4	

GRAPHS









CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5707317 Test Package : AVI 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

: WC0877817 : 02606231

Recieved Diagnosed

: 03 Jan 2024 : 04 Jan 2024 Diagnostician : 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.

ATL AVIATION LTD. 187 ALLEGRA DRIVE WASAGA BEACH, ON CA L9Z 0H7 Contact: Alan Little alan@atltechnologies.org T: (416)779-0546