

## **OIL ANALYSIS REPORT**

Area (C-GRXK) [C-GRXK] CESSNA 182Q 467421

Piston Aircraft Engine

Fluid SHELL AEROSHELL W 80 (12 LTR)

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

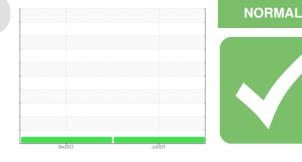
All component wear rates are normal.

#### 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.

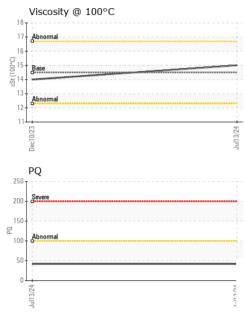


Sample Rating Trend

SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0965073	WC0899952	
Sample Date		Client Info		13 Jul 2024	10 Dec 2023	
TSN	hrs	Client Info		2617	2575	
TSO	hrs	Client Info		1211	1170	
Oil Age	hrs	Client Info		41	21	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
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
PQ		ASTM D8184*		42		
Iron	ppm	ASTM D5185(m)	>90	107	62	
Chromium	ppm	ASTM D5185(m)	>20	17	16	
Nickel	ppm	ASTM D5185(m)	>15	7	4	
Titanium	ppm	ASTM D5185(m)		<1	0	
Silver	ppm	ASTM D5185(m)	>5	0	0	
Aluminum	ppm	ASTM D5185(m)	>25	12	11	
Lead	ppm	ASTM D5185(m)	>20000	4139	2354	
Copper	ppm	ASTM D5185(m)	>25	9	6	
Tin	ppm	ASTM D5185(m)	>30	<1	0	
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)		4	3	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1	0	
Barium	ppm	ASTM D5185(m)		0	0	
Molybdenum	ppm	ASTM D5185(m)		2	2	
Manganese	ppm	ASTM D5185(m)		<1	<1	
Magnesium	ppm	ASTM D5185(m)		<1	<1	
Calcium	ppm	ASTM D5185(m)		8	10	
Phosphorus	ppm	ASTM D5185(m)		1094	1099	
Zinc	ppm	ASTM D5185(m)		7	5	
Sulfur	ppm	ASTM D5185(m)	3000	2297	2864	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	13	10	
Sodium	ppm	ASTM D5185(m)		<1	<1	
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	



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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	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	HAZY	
Odor	scalar	Visual*	NORML	NORML	NORML	
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	
Free Water	scalar	Visual*		NEG	NEG	
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	15.0	14.0	
GRAPHS						
Ferrous Alloys				PQ		
0 iron			210	Sminn		
0			200			
0			190			
			170			
0-			160			
0			150			
0 -	******************		140			
0			130			
Dec10/23			+2/21 110 110	L i contra de la c		
			<u> </u>	Abnormal		
Copper/Aluminum/	/Tin		100	,		
5 Copper			80			
0 - auminum			70			
			60			
5-			50			
0			40			
			30			
5-			20			
0			10			
Dec10/23			Jul13/24 -	3/24		
Dec			Jul	Ull3		
Viscosity @ 100°C						
T						
7- Abnormal						
6						
5 Base						
4						
3-						
Abnormal 2 -						
33			Jul13/24 -			
10			<u> </u>			
Dec10/23			٦٢			

: 15 Jul 2024

Received



 Iso 17025:2017
 Lab Number
 : 02648000
 Tested
 : 16 Jul 2024

 Accredited Laboratory
 Unique Number
 : 5813552
 Diagnosed
 : 16 Jul 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.

 1822 Delderfield Cresc. Mississauga, ON CA L5M 3H4 Contact: Brian Krist bkrist@bell.net T: (905)606-0888 F:

Report Id: BRI182MIS [WCAMIS] 02648000 (Generated: 07/16/2024 10:32:06) Rev: 1

CALA

Laboratory

Sample No. : WC0965073

Contact/Location: Brian Krist - BRI182MIS

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