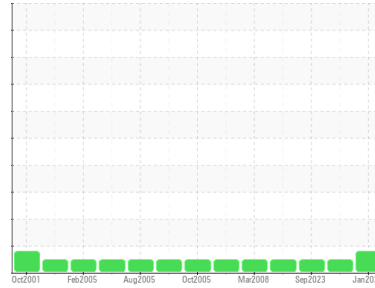




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
(CGHOH)
Machine Id
[CGHOH] EUROCOPTER B2 9096
Component
Main Jet Turbine
Fluid
MOBIL JET OIL 254 (6 LTR)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

Tin ppm levels are abnormal. The ferrography results are normal indicating no abnormal wear in the system.

Contaminants

There is no indication of any contamination in the oil.

Oil Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0863958	WC0847675	WC0847672
Sample Date	Client Info		19 Jan 2024	26 Oct 2023	08 Sep 2023
TSN	hrs	Client Info	12297	12263	12174
TSO	hrs	Client Info	1139	5056	3546
Oil Age	hrs	Client Info	294	269	179
Oil Changed		Client Info	Changed	Not Changd	Not Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >8	<1	<1	<1
Chromium	ppm	ASTM D5185(m) >2	0	0	0
Nickel	ppm	ASTM D5185(m) >2	<1	<1	<1
Titanium	ppm	ASTM D5185(m) >2	0	0	0
Silver	ppm	ASTM D5185(m) >2	0	<1	<1
Aluminum	ppm	ASTM D5185(m) >2	<1	0	0
Lead	ppm	ASTM D5185(m) >3	0	<1	0
Copper	ppm	ASTM D5185(m) >3	<1	<1	<1
Tin	ppm	ASTM D5185(m) >2	▲ 2	0	0
Antimony	ppm	ASTM D5185(m)	0	0	0
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<1	<1	0
Barium	ppm	ASTM D5185(m) 0	0	<1	0
Molybdenum	ppm	ASTM D5185(m) 0	0	0	0
Manganese	ppm	ASTM D5185(m) 0	0	0	0
Magnesium	ppm	ASTM D5185(m) 0	<1	0	<1
Calcium	ppm	ASTM D5185(m) 0	0	<1	<1
Phosphorus	ppm	ASTM D5185(m) 3000	2699	3163	2936
Zinc	ppm	ASTM D5185(m) 0	11	14	13
Sulfur	ppm	ASTM D5185(m) 0	0	15	10
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

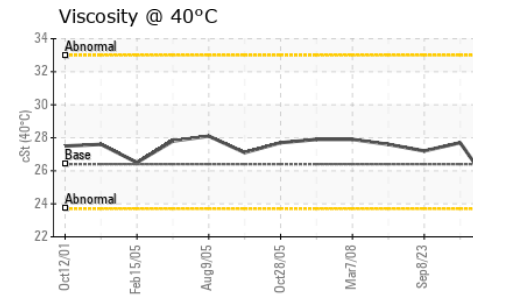
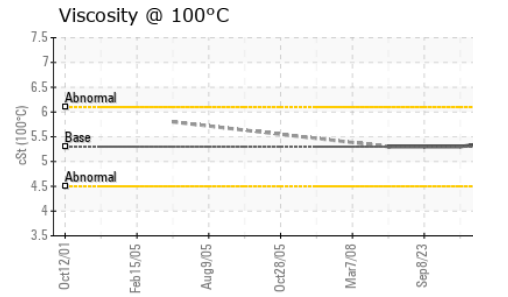
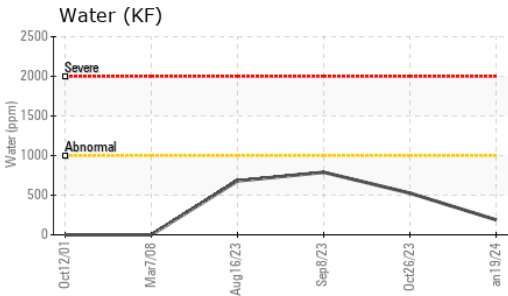
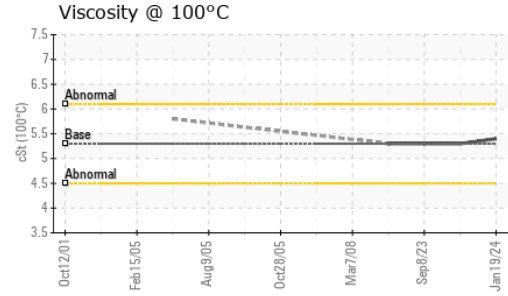
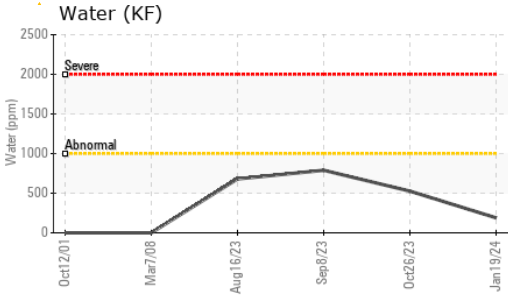
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >8	1	<1	2
Sodium	ppm	ASTM D5185(m)	0	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<1	0	<1
Water	%	ASTM D6304* >0.1	0.018	0.052	0.078
ppm Water	ppm	ASTM D6304* >1000	189	526.1	789.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.08	0.18	0.19	0.14



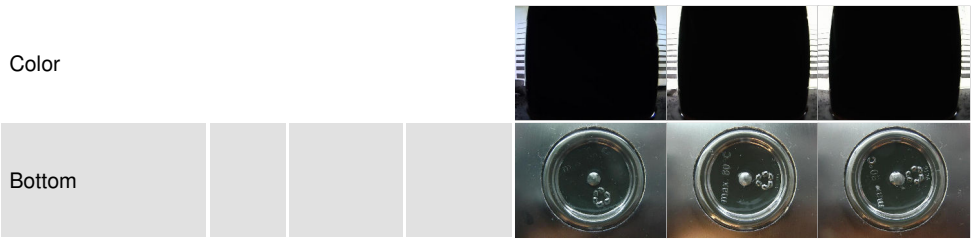
OIL ANALYSIS REPORT



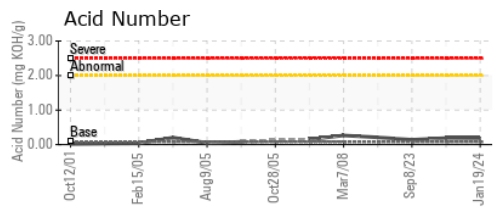
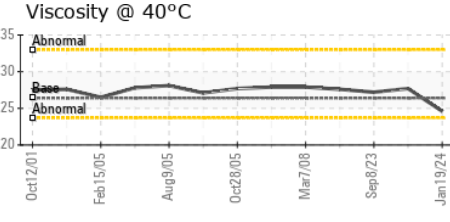
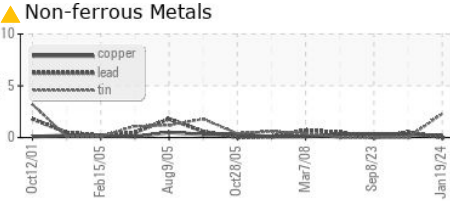
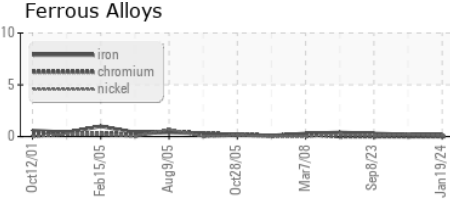
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	26.4	27.7	27.2
Visc @ 100°C	cSt	ASTM D7279(m)	5.3	5.3	5.3
Viscosity Index (VI)	Scale	ASTM D2270*	137	126	130

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0863958
Lab Number : 02610874
Unique Number : 5719969
Test Package : AVI 3
Received : 24 Jan 2024
Diagnosed : 01 Feb 2024
Diagnostician : Bill Quesnel

HYDRO ONE HELICOPTERS
 LAKE SIMCOE REGIONAL AIRPORT, 224 LINE 7 N.
 ORO STATION, ON
 CA L0L 2E0
 Contact: Ken Sanford
 ken.sanford@hydroone.com
 T: (705)487-1771
 F: (705)487-5817

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.



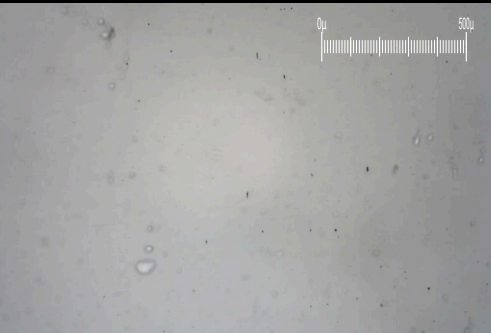
FERROGRAPHY REPORT

Area
(CGHOH)
 Machine Id
[CGHOH] EUROCOPTER B2 9096
 Component
Main Jet Turbine
 Fluid
MOBIL JET OIL 254 (6 LTR)

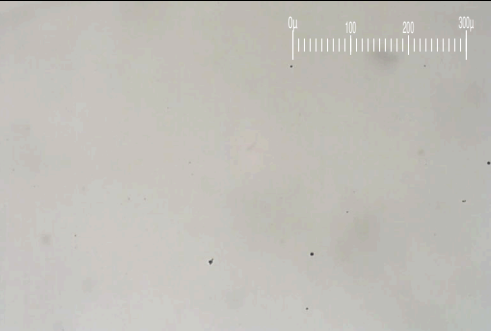
Magn: 200x Illum: BC



Magn: 50x Illum: RW



Magn: 100x Illum: RW

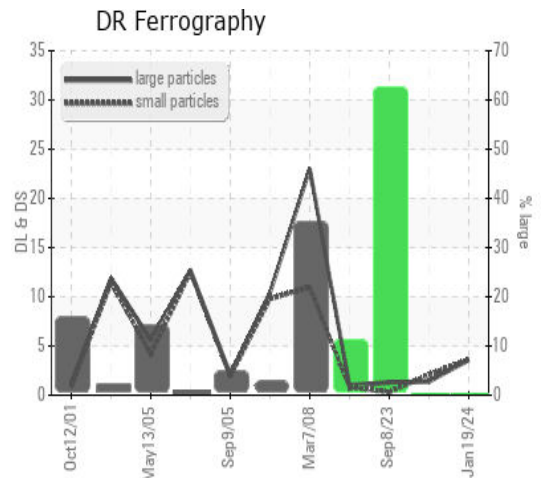


DR-FERROGRAPHY		method	limit/base	current	history1	history2
Large Particles		DR-Ferr*		3.6	1.4	1.3
Small Particles		DR-Ferr*		3.6	2.1	0.3
Total Particles		DR-Ferr*	>---	7.2	3.5	1.6
Large Particles Percentage	%	DR-Ferr*		0	0	62.5
Severity Index		DR-Ferr*		0	1	1

FERROGRAPHY		method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10	ASTM D7684*		1	1	1
Ferrous Sliding	Scale 0-10	ASTM D7684*				
Ferrous Cutting	Scale 0-10	ASTM D7684*				
Ferrous Rolling	Scale 0-10	ASTM D7684*		1	1	
Ferrous Break-in	Scale 0-10	ASTM D7684*				
Ferrous Spheres	Scale 0-10	ASTM D7684*				
Ferrous Black Oxides	Scale 0-10	ASTM D7684*				
Ferrous Red Oxides	Scale 0-10	ASTM D7684*				
Ferrous Corrosive	Scale 0-10	ASTM D7684*				
Ferrous Other	Scale 0-10	ASTM D7684*				
Nonferrous Rubbing	Scale 0-10	ASTM D7684*				
Nonferrous Sliding	Scale 0-10	ASTM D7684*				
Nonferrous Cutting	Scale 0-10	ASTM D7684*				
Nonferrous Rolling	Scale 0-10	ASTM D7684*				
Nonferrous Other	Scale 0-10	ASTM D7684*				
Carbonaceous Material	Scale 0-10	ASTM D7684*				
Lubricant Degradation	Scale 0-10	ASTM D7684*				
Sand/Dirt	Scale 0-10	ASTM D7684*		1		1
Fibres	Scale 0-10	ASTM D7684*				
Spheres	Scale 0-10	ASTM D7684*				
Other	Scale 0-10	ASTM D7684*			1	

WEAR

Tin ppm levels are abnormal. The ferrography results are normal indicating no abnormal wear in the system.



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