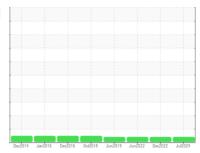


OIL ANALYSIS REPORT

Sample Rating Trend







YZT2
Component
Gearbox
Fluid
MOBIL SHC 629 (--- GAL)

DIAGNOSIS

Machine Id

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

The viscosity of the oil is higher than normal, possibly indicating the addition of a heavier grade of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sample Number Client Info WC WC0625389 WC894435 Sample Date Client Info 17 Jul 2024 04 Dec 2022 06 Jun 2022 07 Jun 2022 07 Jun 2022 08 Jun 2022			Dec2014 J	Jan2016 Dec2016 Oct201	18 Jun2019 Jun2022 Dec2022	! Jul2024	
Sample Date	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age days Client Info 0 0 0 0 0 0 0 0 0	Sample Number		Client Info		wc	WC0625389	WC894435
Oil Age days Client Info N/A	Sample Date		Client Info		17 Jul 2024	04 Dec 2022	06 Jun 2022
Oil Age days Client Info N/A	•	days	Client Info		0	0	0
Cili Changed Cilient Info N/A ABNORMAL ABNORM			Client Info		0	0	0
CONTAMINATION method limit/base current history1 history2	Oil Changed				N/A	N/A	N/A
Water WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >30 0 <1 0 Chromium ppm ASTM D5185(m) >5 0 <1 0 Nickel ppm ASTM D5185(m) >5 0 <1 0 Silver ppm ASTM D5185(m) >5 0 0 0 Aluminum ppm ASTM D5185(m) >5 0 0 0 Aluminum ppm ASTM D5185(m) >8 0 0 0 Lead ppm ASTM D5185(m) >8 <1 0 0 Copper ppm ASTM D5185(m) >4 0 0 0 Vanadium ppm ASTM D5185(m) >5 0 0 0 Beryllium ppm ASTM D5185(m) 0 0 0 <t< td=""><td>-</td><td></td><td></td><td></td><td>ABNORMAL</td><td>ABNORMAL</td><td>ABNORMAL</td></t<>	-				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185(m) >30 0 <1	CONTAMINATIO	N	method	limit/base	current	history1	history2
Iron	Water		WC Method	>0.2	NEG	NEG	NEG
Chromium ppm ASTM D518S(m) >4 0 0 0 Nickel ppm ASTM D518S(m) >5 0 <1 0 Titanium ppm ASTM D518S(m) >5 0 0 0 Silver ppm ASTM D518S(m) >5 0 0 0 Aluminum ppm ASTM D518S(m) >5 0 0 0 Lead ppm ASTM D518S(m) >10 0 0 0 Lead ppm ASTM D518S(m) >8 <1 0 0 Copper ppm ASTM D518S(m) >4 0 0 0 Tin ppm ASTM D518S(m) >5 0 0 1 Vanadium ppm ASTM D518S(m) 0 0 0 0 Beryllium ppm ASTM D518S(m) 0 0 0 0 Cadmium ppm ASTM D518S(m) <1 1 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185(m)	>30	0	<1	0
Titanium ppm ASTM D5185(m) 0 0 0 Silver ppm ASTM D5185(m) >5 0 0 0 Aluminum ppm ASTM D5185(m) >8 0 0 0 Lead ppm ASTM D5185(m) >8 1 0 0 Copper ppm ASTM D5185(m) >4 0 0 0 Tin ppm ASTM D5185(m) >4 0 0 0 Antimony ppm ASTM D5185(m) >5 0 0 1 Vanadium ppm ASTM D5185(m) 5 0 0 0 Beryllium ppm ASTM D5185(m) 0 0 0 0 Cadmium ppm ASTM D5185(m) 0 0 0 0 ADDITIVES method limit/base current history1 history1 Barium ppm ASTM D5185(m) <1 1 <1 <1	Chromium	ppm	ASTM D5185(m)	>4	0	0	0
Silver	Nickel	ppm	ASTM D5185(m)	>5	0	<1	0
Silver	Titanium	ppm	ASTM D5185(m)		0	0	0
Aluminum	Silver		. ,	>5	0	0	0
Lead	Aluminum			>8	0	0	0
Copper ppm ASTM D5185(m) >8 <1 0 0 Tin ppm ASTM D5185(m) >4 0 0 0 Vanadium ppm ASTM D5185(m) >5 0 0 0 Beryllium ppm ASTM D5185(m) 0 0 0 0 Cadmium ppm ASTM D5185(m) 0 0 0 0 ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185(m) <1			, ,				
Tin ppm ASTM D5185(m) >4 0 0 0 0 0 Antimony ppm ASTM D5185(m) >5 0 0 0 0 0 Beryllium ppm ASTM D5185(m) 0 0 0 0 0 Cadmium ppm ASTM D5185(m) 0 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 0 1 0 0 0 Magnesium ppm ASTM D5185(m) 0 0 0 0 0 Magnesium ppm ASTM D5185(m) 0 0 0 0 0 Magnesium ppm ASTM D5185(m) 0 0 0 0 0 0 Calcium ppm ASTM D5185(m) 0 0 0 0 0 0 Magnesium ppm ASTM D5185(m) 0 0 0 0 0 0 0 Magnesium ppm ASTM D5185(m) 0 0 0 0 0 0 0 0 Calcium ppm ASTM D5185(m) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			. ,				
Antimony			. ,				
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) <1 1 <1 Barium ppm ASTM D5185(m) <1 0 0 Molybdenum ppm ASTM D5185(m) 0 1 0 Manganese ppm ASTM D5185(m) 0 0 <1 0 Magnesium ppm ASTM D5185(m) 0 0 <1 0 Calcium ppm ASTM D5185(m) 463 468 465 Zinc ppm ASTM D5185(m) 1 2 1 Sulfur ppm ASTM D5185(m) 80 117 424 Lithium ppm ASTM D5185(m) 21 <1							
Beryllium	•		. ,	70			
Cadmium ppm ASTM D5185(m) 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) <1			. ,				
ADDITIVES	-		. ,		-		
Boron ppm ASTM D5185(m) <1 1 0 0 0 0 0 0 0 0		1-1-	. ,	limit/base	current		history2
Barium ppm ASTM D5185(m) <1 0 0 Molybdenum ppm ASTM D5185(m) 0 1 0 Manganese ppm ASTM D5185(m) 0 0 0 Magnesium ppm ASTM D5185(m) 0 0 <1		nnm					•
Molybdenum ppm ASTM D5185(m) 0 1 0 Manganese ppm ASTM D5185(m) 0 0 0 Magnesium ppm ASTM D5185(m) 0 0 <1 Calcium ppm ASTM D5185(m) <1 0 <1 Phosphorus ppm ASTM D5185(m) 463 468 465 Zinc ppm ASTM D5185(m) 1 2 1 Sulfur ppm ASTM D5185(m) 80 117 424 Lithium ppm ASTM D5185(m) <1 <1 <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >10 20 16 16 Sodium ppm ASTM D5185(m) >20 0 0 0 Potassium ppm ASTM D5185(m) >20 0 0 0 FLUID CLEANLINESS meth							
Manganese ppm ASTM D5185(m) 0 0 0 Magnesium ppm ASTM D5185(m) 0 0 <1			, ,				
Magnesium ppm ASTM D5185(m) 0 <1 Calcium ppm ASTM D5185(m) <1	•						
Calcium ppm ASTM D5185(m) <1 0 <1 Phosphorus ppm ASTM D5185(m) 463 468 465 Zinc ppm ASTM D5185(m) 1 2 1 Sulfur ppm ASTM D5185(m) 80 117 424 Lithium ppm ASTM D5185(m) <1	-		. ,				
Phosphorus ppm ASTM D5185(m) 463 468 465 Zinc ppm ASTM D5185(m) 1 2 1 Sulfur ppm ASTM D5185(m) 80 117 424 Lithium ppm ASTM D5185(m) <1	-				-		
Zinc ppm ASTM D5185(m) 1 2 1			, ,				
Sulfur ppm ASTM D5185(m) 80 117 424 Lithium ppm ASTM D5185(m) <1 <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >10 20 16 16 Sodium ppm ASTM D5185(m) >20 0 0 0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >20000 429 574 1311 Particles >6μm ASTM D7647 >5000 144 129 398 Particles >14μm ASTM D7647 >640 21 9 38 Particles >21μm ASTM D7647 >40 1 0 0 Particles >71μm ASTM D7647 >10 0 0							
Lithium ppm ASTM D5185(m) <1 <1 <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >10 20 16 16 Sodium ppm ASTM D5185(m) >20 0 0 0 Potassium ppm ASTM D5185(m) >20 0 0 0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >20000 429 574 1311 Particles >6μm ASTM D7647 >5000 144 129 398 Particles >14μm ASTM D7647 >640 21 9 38 Particles >21μm ASTM D7647 >40 1 0 0 Particles >71μm ASTM D7647 >10 0 0	-		. ,				
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >10 20 16 16 Sodium ppm ASTM D5185(m) >20 1 <1			. ,				
Silicon ppm ASTM D5185(m) >10 20 16 16 Sodium ppm ASTM D5185(m) >10 20 16 16 Potassium ppm ASTM D5185(m) >20 0 0 0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >20000 429 574 1311 Particles >6μm ASTM D7647 >5000 144 129 398 Particles >14μm ASTM D7647 >640 21 9 38 Particles >21μm ASTM D7647 >160 6 3 9 Particles >38μm ASTM D7647 >40 1 0 0 Particles >71μm ASTM D7647 >10 0 0	Lithium	ppm	ASTM D5185(m)		<1	<1	<1
Sodium ppm ASTM D5185(m) <1 <1 0 Potassium ppm ASTM D5185(m) >20 0 0 0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >20000 429 574 1311 Particles >6μm ASTM D7647 >5000 144 129 398 Particles >14μm ASTM D7647 >640 21 9 38 Particles >21μm ASTM D7647 >160 6 3 9 Particles >38μm ASTM D7647 >40 1 0 0 Particles >71μm ASTM D7647 >10 0 0	CONTAMINANT	S	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185(m) >20 0 0 0 FLUID CLEANLINESS method limit/base current history2 Particles >4μm ASTM D7647 >20000 429 574 1311 Particles >6μm ASTM D7647 >5000 144 129 398 Particles >14μm ASTM D7647 >640 21 9 38 Particles >21μm ASTM D7647 >160 6 3 9 Particles >38μm ASTM D7647 >40 1 0 0 Particles >71μm ASTM D7647 >10 0 0	Silicon	ppm	ASTM D5185(m)	>10	20	16	16
FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >20000 429 574 1311 Particles >6μm ASTM D7647 >5000 144 129 398 Particles >14μm ASTM D7647 >640 21 9 38 Particles >21μm ASTM D7647 >160 6 3 9 Particles >38μm ASTM D7647 >40 1 0 0 Particles >71μm ASTM D7647 >10 0 0 0	Sodium	ppm	ASTM D5185(m)		<1	<1	0
Particles >4μm ASTM D7647 >20000 429 574 1311 Particles >6μm ASTM D7647 >5000 144 129 398 Particles >14μm ASTM D7647 >640 21 9 38 Particles >21μm ASTM D7647 >160 6 3 9 Particles >38μm ASTM D7647 >40 1 0 0 Particles >71μm ASTM D7647 >10 0 0	Potassium	ppm	ASTM D5185(m)	>20	0	0	0
Particles >6μm ASTM D7647 >5000 144 129 398 Particles >14μm ASTM D7647 >640 21 9 38 Particles >21μm ASTM D7647 >160 6 3 9 Particles >38μm ASTM D7647 >40 1 0 0 Particles >71μm ASTM D7647 >10 0 0	FLUID CLEANLI	NESS	method	limit/base	current	history1	history2
Particles >14μm ASTM D7647 >640 21 9 38 Particles >21μm ASTM D7647 >160 6 3 9 Particles >38μm ASTM D7647 >40 1 0 0 Particles >71μm ASTM D7647 >10 0 0	Particles >4µm		ASTM D7647	>20000	429	574	1311
Particles >14μm ASTM D7647 >640 21 9 38 Particles >21μm ASTM D7647 >160 6 3 9 Particles >38μm ASTM D7647 >40 1 0 0 Particles >71μm ASTM D7647 >10 0 0	Particles >6µm		ASTM D7647	>5000	144	129	398
Particles >21μm ASTM D7647 >160 6 3 9 Particles >38μm ASTM D7647 >40 1 0 0 Particles >71μm ASTM D7647 >10 0 0	·		ASTM D7647	>640	21		38
Particles >38μm ASTM D7647 >40 1 0 0 Particles >71μm ASTM D7647 >10 0 0 0			ASTM D7647	>160	6	3	9
Particles >71μm ASTM D7647 >10 0 0							
	·						
							_



OIL ANALYSIS REPORT







Laboratory

Laboratory

Sample No. Lab Number

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

: 02648806 Unique Number : 5814358

Diagnosed Test Package : IND 2 (Additional Tests: PrtCount) 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.

Received

Tested

: 18 Jul 2024

: 19 Jul 2024

: 21 Jul 2024 - Kevin Marson

NAV CANADA

7421 135 STREET SURREY, BC CA V3W 0M8

Contact: Paul Idasz paul.idasz@navcanada.ca

T: (604)354-3010 F: (604)775-9659

Contact/Location: Paul Idasz - NAVSUR