**WEAR CONTAMINATION FLUID CONDITION** 

**SEVERE ABNORMAL NORMAL** 

1 [2534809]

01-0110-000-000 TRANSFER CONV N°2 (1M21)

1 Gearbox							
MOBIL MOBILGEAR SHC 220 (2 GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check all areas where dirt can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend an early resample to monitor this condition.	Sample Number		Client Info		WC0857993	WC0754110	WC980908
	Sample Date		Client Info		11 Apr 2024	01 May 2023	19 Jul 2018
	Machine Age	yrs	Client Info		0	0	0
	Oil Age	yrs	Client Info		0	2	0
	Filter Age	yrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	N/A	N/A
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				SEVERE	SEVERE	NORMAL
WEAR	PQ		ASTM D8184*		1	3	28
Iron ppm levels are severe. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.	Iron	ppm	ASTM D5185(m)	>200	<b>1110</b>	<b>4</b> 965	37
	Chromium	ppm	ASTM D5185(m)	>15	3	3	1
	Nickel	ppm	ASTM D5185(m)	>15	<1	<1	<1
	Titanium	ppm	ASTM D5185(m)		0	0	0
	Silver	ppm	ASTM D5185(m)		0	0	0
	Aluminum	ppm	ASTM D5185(m)	>25	<1	1	2
	Lead	ppm	ASTM D5185(m)	>100	0	0	<1
	Copper	ppm	ASTM D5185(m)	>200	<1	0	<1
	Tin	ppm	ASTM D5185(m)	>25	0	0	0
	Vanadium	ppm	ASTM D5185(m)		0	0	0
	White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>50	<u>^</u> 86	<b>△</b> 91	16
There is a moderate concentration of dirt present in the oil. High amount of ingressed dirt has caused abrasive wear to the component.	Potassium	ppm	ASTM D5185(m)	>20	<1	1	2
	Water	ρρ	WC Method		NEG	NEG	NEG
	Silt	scalar	Visual*	NONE	NONE	NONE	NONE
	Debris	scalar	Visual*	NONE	NONE	NONE	VLITE
	Sand/Dirt	scalar	Visual*	NONE	VLITE	NONE	NONE
	Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
	Odor	scalar	Visual*	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
FLUID CONDITION	0 - 40		AOTM DE40E()				
The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.	Sodium	ppm	ASTM D5185(m)		<1	<1	<1
	Boron	ppm	ASTM D5185(m)		20	20	24
	Barium	ppm	ASTM D5185(m)		0	0	<1
	Molybdenum	ppm	ASTM D5185(m)		0	0	<1
	Manganese	ppm	ASTM D5185(m)		12	11	<1
	Magnesium	ppm	ASTM D5185(m)		<1	<1	<1
	Calcium	ppm	ASTM D5185(m)		33	37	28
	Phosphorus	ppm	ASTM D5185(m)		323	384	241
	Zinc	ppm	ASTM D5185(m)		4	4	11

Sulfur

Acid Number (AN)

Visc @ 40°C

ppm

ASTM D5185(m)

ASTM D7279(m) 220

mg KOH/g ASTM D974\*

4278

1.01

225

8610

0.94

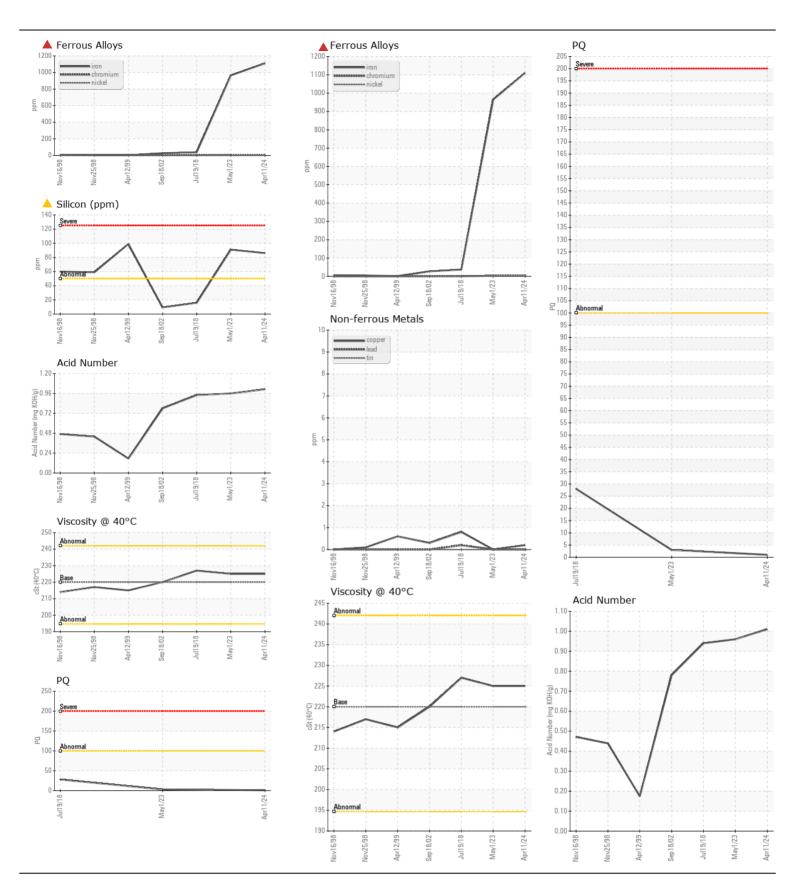
227

4756

0.96

225

Contact/Location: Dan Havis - MACPEM





CALA ISO 17025:2017 Accredited

Laboratory

Laboratory Sample No. Lab Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0857993

: 02629011 Unique Number : 5762143

Received **Tested** Diagnosed : 15 Apr 2024

: 16 Apr 2024

: 17 Apr 2024 - Kevin Marson

Test Package : IND 2 (Additional Tests: TAN Man) 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.

Roseburg Pembroke MDF Inc.

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