WEAR CONTAMINATION FLUID CONDITION

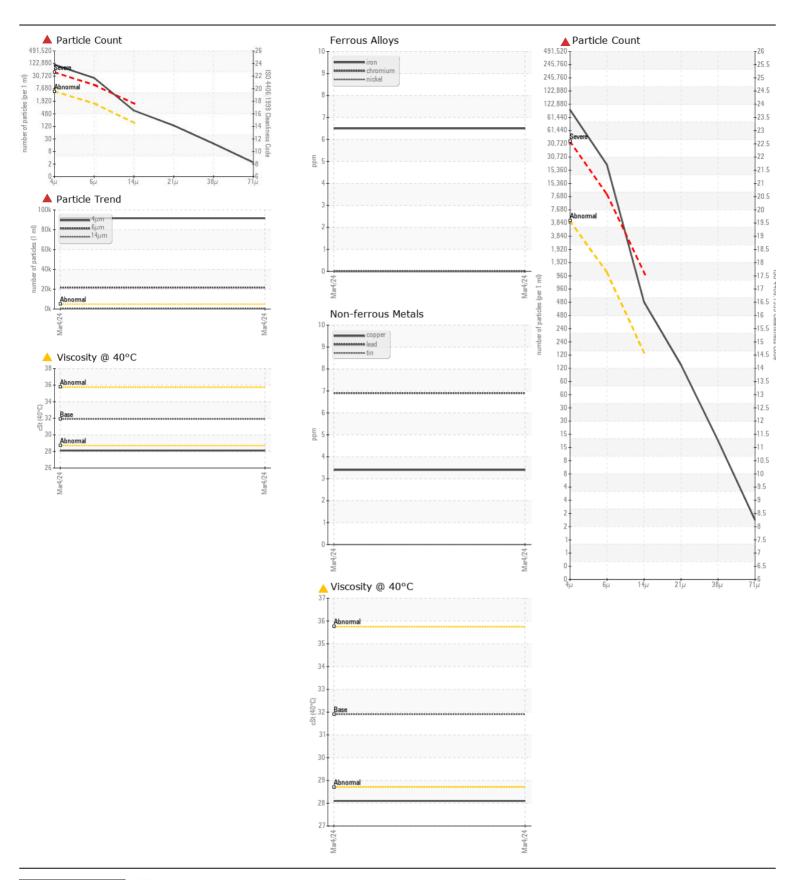
NORMAL SEVERE ABNORMAL

Machine Id

501128

Component Hydraulic System

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check all areas where contaminants 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. Resample in 30-45 days to monitor this situation.	Sample Number	00111	Client Info	Limitorion	GFL0107881		
	Sample Date		Client Info		04 Mar 2024		
	Machine Age	kms	Client Info		361957		
	Oil Age	kms	Client Info		0		
	Filter Age	kms	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		N/A		
	Sample Status				SEVERE		
WEAR	Iron	ppm	ASTM D5185(m)	<b>&gt;</b> 20	6		
VEAIT	Chromium	ppm	ASTM D5185(m)		0		
All component wear rates are normal.	Nickel	ppm	ASTM D5185(m)		0		
	Titanium	ppm	ASTM D5185(m)	>10	0		
	Silver	ppm	ASTM D5185(m)		<1		
	Aluminum	ppm	ASTM D5185(m)	>10	<1		
	Lead	ppm	ASTM D5185(m)	>10	7		
	Copper	ppm	ASTM D5185(m)		3		
	Tin	ppm	( )	>10	0		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>20	2		
There is a high agreement of a satisfactory (0.15, 400 asis agree)	Potassium	ppm	ASTM D5185(m)	>20	<1		
There is a high amount of particulates (2 to 100 microns in size) present in the oil.	Water		WC Method	>0.1	NEG		
	Particles >4µm		ASTM D7647	>5000	<b>4</b> 91582		
	Particles >6µm		ASTM D7647	>1300	<b>21675</b>		
	Particles >14µm		ASTM D7647	>160	<u></u> 601		
	Particles >21µm		ASTM D7647	>40	<u> </u>		
	Particles >38µm		ASTM D7647	>10	<b>16</b>		
	Particles >71µm		ASTM D7647		2		
	Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>24/22/16</b>		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	VLITE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>0.1	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		1		
LOID CONDITION	Boron	ppm	ASTM D5185(m)	0	- <1		
The oil viscosity is lower than typical, possibly indicating the addition of lighter grade oil. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		0		
	Manganese	ppm	( )	1	0		
	Magnesium	ppm	ASTM D5185(m)		1		
	Calcium	ppm	ASTM D5185(m)	50	86		
	Phosphorus	ppm	ASTM D5185(m)		327		
	Zinc	ppm	ASTM D5185(m)	430	408		
	Sulfur	ppm	ASTM D5185(m)	760	842		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 310 - Winnipeg : GFL0107881 Lab Number : 02619947

Unique Number : 5737057

Received **Tested** Diagnosed Test Package : MOB 1 ( Additional Tests: PrtCount )

: 06 Mar 2024

: 06 Mar 2024 - Kevin Marson

: 05 Mar 2024

#360 - 555 Hervo Street, Winnipeg, MB CA R3T 3L6 Contact: Joshua Lourenco jlourenco@gflenv.com T: (204)987-9600

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.