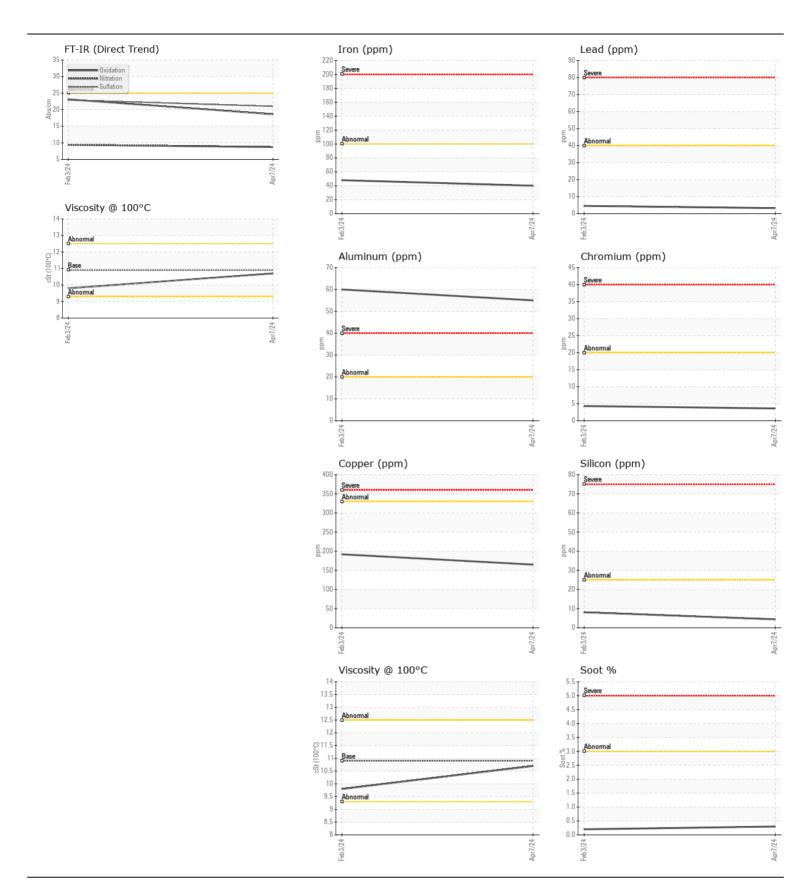
WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Machine Id **51506**

Component
Diesel Engine
Fluid

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0915508	WC0892096	
	Sample Date		Client Info		07 Apr 2024	03 Feb 2024	
	Machine Age	mls	Client Info		33376	35235	
	Oil Age	mls	Client Info		33376	34935	
	Filter Age	mls	Client Info		33376	34935	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	nnm	ASTM D5185(m)	> 100	40	48	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(III) ASTM D5185(m)		40	40	
	Nickel	ppm	ASTM D5185(m)		<1 <1	<1	
	Titanium	ppm	ASTM D5185(m)	Z-T	0	0	
	Silver	ppm	ASTM D5185(m)	>3	0	<1	
	Aluminum	ppm	ASTM D5185(m)		55	60	
	Lead	ppm	ASTM D5185(m)		3	4	
	Copper	ppm	ASTM D5185(m)		165	192	
	Tin	ppm	ASTM D5185(m)		<1	3	
	Vanadium	ppm	ASTM D5185(m)		0	0	
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185(m)		4	8	
	Potassium	ppm	ASTM D5185(m)		107	139	
	Fuel		WC Method		<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol	0/	WC Method	0	NEG	NEG	
	Soot % Nitration	% Abs/cm	ASTM D7844* ASTM D7624*		0.3 8.7	0.2 9.4	
	Sulfation	Abs/.1mm	ASTM D7624 ASTM D7415*	>20	21.0	22.9	
	Emulsified Water		Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		3	6	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	250	8	29	
	Barium	ppm	ASTM D5185(m)	10	<1	<1	
	Molybdenum	ppm	ASTM D5185(m)	100	59	42	
	Manganese	ppm	ASTM D5185(m)		2	4	
	Magnesium	ppm	ASTM D5185(m)		928	553	
	Calcium	ppm	ASTM D5185(m)	3000	1246	1695	
	Phosphorus	ppm	ASTM D5185(m)		907	724	
	Zinc	ppm	ASTM D5185(m)		1134	834	
	Sulfur	ppm	ASTM D5185(m)		1713	1790	
	Oxidation	Abs/.1mm	ASTM D7414*		18.6	23.1	
	Visc @ 100°C	cSt	ASTM D7279(m)	10.9	10.7	9.8	





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02632293

Unique Number : 5773446 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : WC0915508 : 30 Apr 2024 **Tested** : 30 Apr 2024

Diagnosed : 30 Apr 2024 - Wes Davis

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.

MANITOULIN TRANSPORT

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F: x: