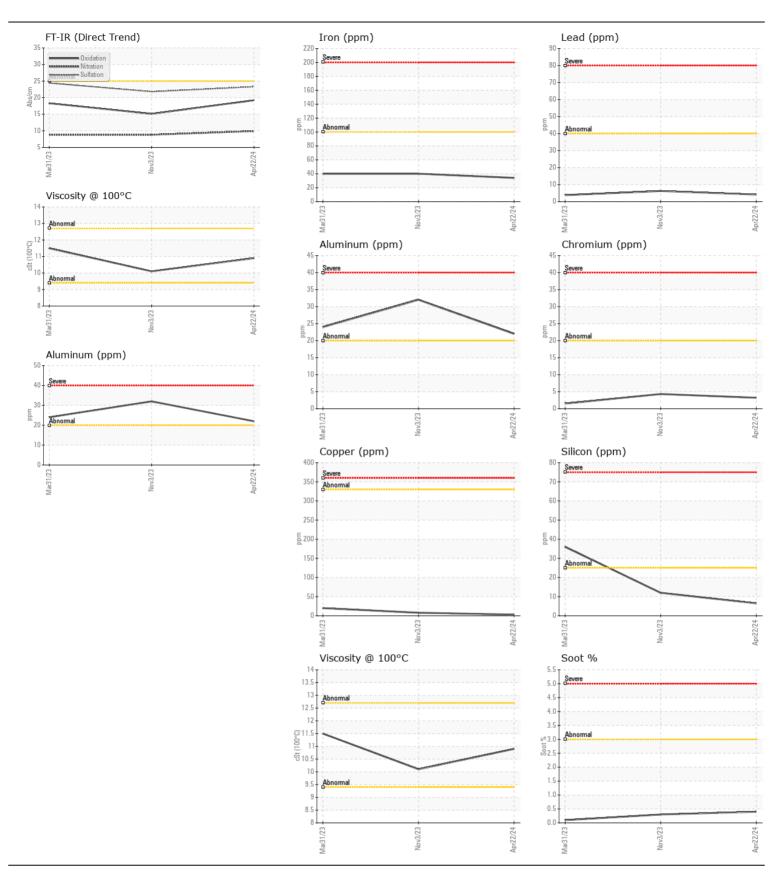
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id **T211**

Component
Diesel Engine

RECOMMENDATION Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0906431	WC0852070	WC0790247
	Sample Date		Client Info		22 Apr 2024	03 Nov 2023	31 Mar 2023
	Machine Age	kms	Client Info		187954	122867	51080
	Oil Age	kms	Client Info		0	0	0
	Filter Age	kms	Client Info		0	0	0
	Oil Changed		Client Info		N/A	Changed	Changed
	Filter Changed		Client Info		N/A	Changed	Changed
	Sample Status				NORMAL	NORMAL	ABNORMAL
WEAR	Iron	ppm	ASTM D5185(m)	>100	34	40	40
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		3	4	2
	Nickel	ppm	ASTM D5185(m)		<1	<1	<1
	Titanium	ppm	ASTM D5185(m)		0	0	<1
	Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
	Aluminum	ppm	ASTM D5185(m)		22	32	24
	Lead	ppm	ASTM D5185(m)		4	6	4
	Copper	ppm	ASTM D5185(m)		3	8	20
	Tin	ppm	ASTM D5185(m)		<1	2	3
	Vanadium	ppm	ASTM D5185(m)		0	0	0
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon		ACTM DE10E/m)	. 05	 С	10	A 06
CONTAMINATION		ppm	ASTM D5185(m)		6	12	△ 36
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.	Potassium	ppm	ASTM D5185(m)		52	82	75
	Fuel		WC Method		<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG NEG	NEG	NEG
	Glycol Soot %	%	WC Method ASTM D7844*	. 0	0.4	NEG 0.3	NEG 0.1
	Nitration	Abs/cm	ASTM D7644 ASTM D7624*		9.9	8.8	8.8
	Sulfation	Abs/.1mm		>20	23.3	21.8	24.4
	Silt		Visual*	NONE	NONE	21.0	24.4
	Debris	scalar scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML	NORML	NORMI
	Emulsified Water			>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium				· · · · · · · · · · · · · · · · · · ·	3	5
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m) ASTM D5185(m)		3 25	19	5 52
	Barium	ppm	ASTM D5185(III) ASTM D5185(m)				
	Molybdenum	ppm	ASTM D5185(III) ASTM D5185(m)		0 74	<1 79	5 64
	•	ppm	ASTM D5185(m)			1	6
	Manganese Magnesium	ppm	ASTM D5185(III) ASTM D5185(m)		<1 199	361	453
	Calcium	ppm	ASTM D5185(m)		1836	1496	1828
	Phosphorus	ppm	ASTM D5185(III) ASTM D5185(m)		942	835	1009
	Zinc	ppm	ASTM D5185(m) ASTM D5185(m)		942 1130	963	1167
	Sulfur	ppm	ASTM D5185(m) ASTM D5185(m)		2577	2421	2531
	Juliui	ppm	(ווו)כסוכם ואוו פא		2311	2421	2001
	Oxidation	Abs/.1mm	ASTM D7414*	-25	19.2	15.1	18.3





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0906431 : 02631616

Unique Number : 5772769

Received **Tested** Diagnosed

: 26 Apr 2024 : 26 Apr 2024

: 26 Apr 2024 - Wes Davis

Test Package : MOB 1 (Additional Tests: Visual) 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.

Zavcor Trucking Limited

3650 Eagle Street Stevensville, ON CA L0S 1S0 Contact: Kirk Zavitz kirzav@zavcor.com

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