WEAR CONTAMINATION **FLUID CONDITION**

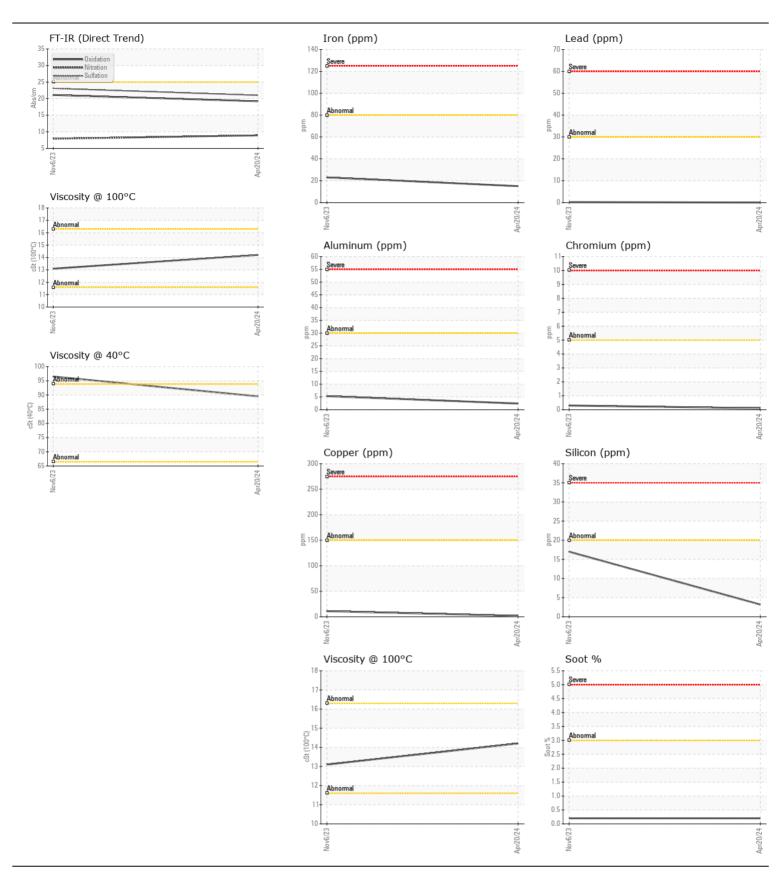
NORMAL NORMAL NORMAL

Machine Id

69

Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		PC0045327	PC0066783	
	Sample Date		Client Info		20 Apr 2024	06 Nov 2023	
	Machine Age	hrs	Client Info		579	289	
	Oil Age	hrs	Client Info		250	289	
	Filter Age	hrs	Client Info		250	289	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>80	15	23	
	Chromium	ppm	ASTM D5185(m)	>5	<1	<1	
Metal levels are typical for a new component breaking in.	Nickel	ppm	ASTM D5185(m)		0	<1	
	Titanium	ppm	ASTM D5185(m)		0	0	
	Silver	ppm	ASTM D5185(m)	>3	0	<1	
	Aluminum	ppm	ASTM D5185(m)	>30	2	5	
	Lead	ppm	ASTM D5185(m)	>30	0	<1	
	Copper	ppm	ASTM D5185(m)	>150	2	11	
	Tin	ppm	ASTM D5185(m)	>5	0	<1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>20	3	17	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	3	7	
	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	ASTM D7844*	>3	0.2	0.2	
	Nitration	Abs/cm	ASTM D7624*	>20	8.9	7.9	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	21.0	23.1	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		4	5	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		39	45	
	Barium	ppm	ASTM D5185(m)		<1	5	
	Molybdenum	ppm	ASTM D5185(m)		55	44	
	Manganese	ppm	ASTM D5185(m)		<1	6	
	Magnesium	ppm	ASTM D5185(m)		1053	593	
	Calcium	ppm	ASTM D5185(m)		917	1520	
	Phosphorus	ppm	ASTM D5185(m)		973	770	
	Zinc	ppm	ASTM D5185(m)		1147	893	
	Sulfur	ppm	ASTM D5185(m)		2651	2085	
	Oxidation	Abs/.1mm	ASTM D7414*	>25	19.2	21.1	
	Visc @ 40°C	cSt	ASTM D7279(m)		89.5	96.5	
	Visc @ 100°C	cSt	ASTM D7279(m)		14.2	13.1	
	Viscosity Index (VI)	Scale	ASTM D2270*	Contact/l	164	133	 v. CITK





CALA ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Sample No. Received : PC0045327 Lab Number : 02631870 **Tested**

Unique Number : 5773023 Diagnosed Test Package : MOB 1 (Additional Tests: KV40, VI)

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.

: 29 Apr 2024

: 29 Apr 2024

: 29 Apr 2024 - Wes Davis

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