**WEAR** CONTAMINATION **FLUID CONDITION** 

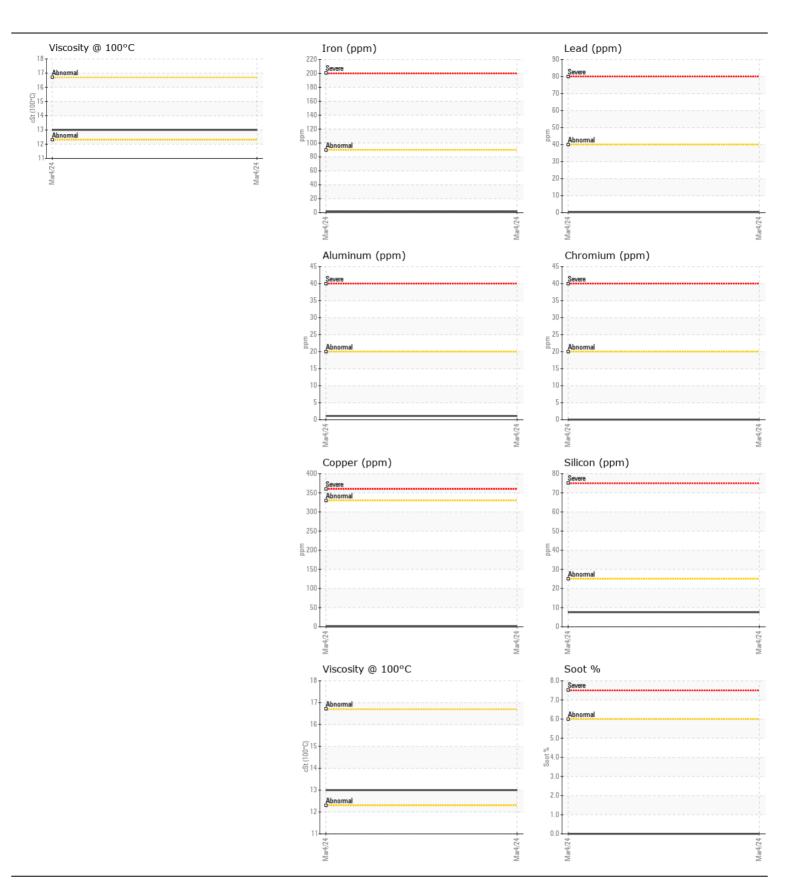
**NORMAL NORMAL NORMAL** 

Area [103009]

37241940

Component
Diesel Engine

Diesel Engine							
{not provided} ( LTR)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 40 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.	Sample Number		Client Info		CU0021037		
	Sample Date		Client Info		04 Mar 2024		
	Machine Age	hrs	Client Info		214		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	lvon		ACTM DE10E(m)	. 00	• • • • • • • • • • • • • • • • • • • •		
Metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185(m)		2		
	Chromium Nickel	ppm	ASTM D5185(m)		0		
	Titanium	ppm	ASTM D5185(m)				
	Silver	ppm	ASTM D5185(m) ASTM D5185(m)		0		
	Aluminum	ppm	ASTM D5185(m)		1		
	Lead	ppm	ASTM D5185(m)	>40	<1		
	Copper	ppm	ASTM D5185(m)		<1		
	Tin	ppm	ASTM D5185(m)		0		
	Vanadium	ppm	ASTM D5185(m)	>10	0		
	· · · · · · · · · · · · · · · · · · ·	ppiii	AO INI D3 103(III)				
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	8		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1		
	Fuel		WC Method	>3.0	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>6	0		
	Nitration	Abs/cm	ASTM D7624*	>20	6.5		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	19.8		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		3		
	Boron	ppm	ASTM D5185(m)		40		
The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		43		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)		751		
	Calcium	ppm	ASTM D5185(m)		1091		
	Phosphorus	ppm	ASTM D5185(m)		676		
	Zinc	ppm	ASTM D5185(m)		756		
	Sulfur	ppm	ASTM D5185(m)		1924		
	Oxidation	Abs/.1mm		>25	16.6		
	Visc @ 100°C	cSt	ASTM D7279(m)		13.0		





CALA ISO 17025:2017 Accredited

Laboratory

Laboratory

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Sample No. : CU0021037 Lab Number : 02620099

Unique Number : 5737209 Test Package : MOB 1

Received : 06 Mar 2024 : 06 Mar 2024 **Tested** 

: 06 Mar 2024 - Kevin Marson Diagnosed

**CUMMINS EASTERN CANADA LP** 

3189 SWANSEA CRESCENT OTTAWA, ON CA K1G 3W5

Contact: Cindy Harrison cindy.harrison@cummins.com T: (613)736-1146

F: x:

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.