WEAR CONTAMINATION FLUID CONDITION

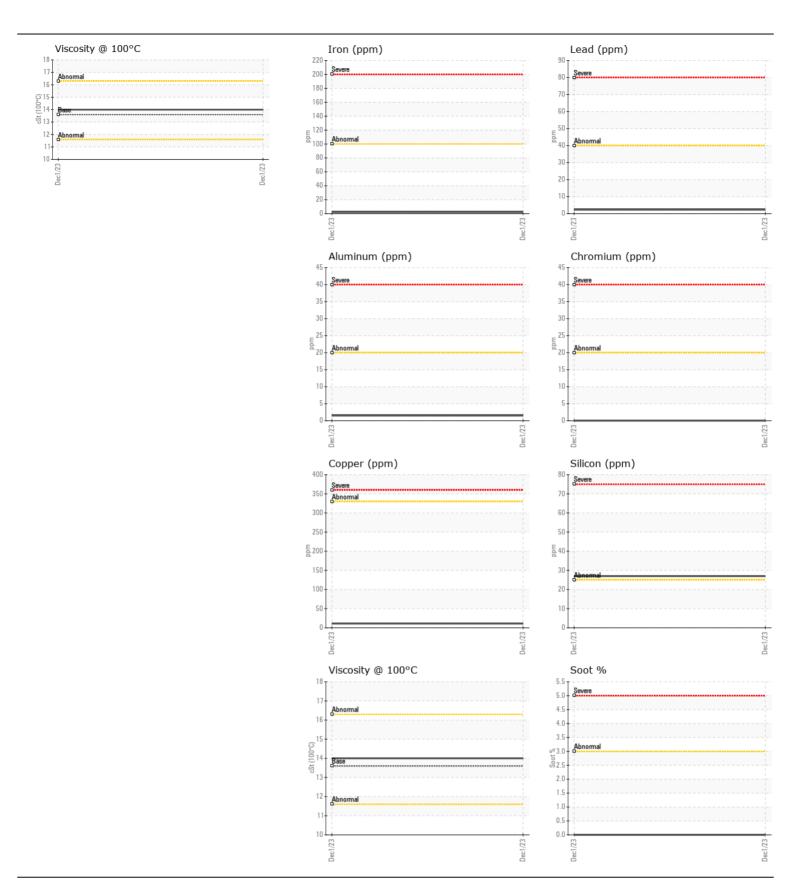
NORMAL NORMAL

Area [101803] Machine Id

K160119459

Component Diesel Engine

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		CU0021084		
	Sample Date		Client Info		01 Dec 2023		
	Machine Age	hrs	Client Info		481		
	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		
NEAD			40TM D5405()	400			
WEAR	Iron	ppm	ASTM D5185(m)		2		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)	>20	0		
	Nickel	ppm	ASTM D5185(m)	>4	0		
	Titanium	ppm	ASTM D5185(m)	0	0		
	Silver	ppm	ASTM D5185(m)		0		
	Aluminum	ppm	ASTM D5185(m)		2		
	Lead	ppm	ASTM D5185(m)		2		
	Copper	ppm	ASTM D5185(m)	>330	11		
	Tin	ppm	ASTM D5185(m)	>15	0		
	Vanadium	ppm	ASTM D5185(m)		0		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	27		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1		
	Fuel		WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>3	0		
	Nitration	Abs/cm	ASTM D7624*	>20	6.7		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	19.7		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	39	38		
	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		45		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm		616	776		
	Calcium	ppm		1554	1127		
	Phosphorus	ppm	ASTM D5185(m)	899	693		
	Zinc	ppm		1069	783		
	Sulfur	ppm	ASTM D5185(m)		1998		
	Oxidation	Abs/.1mm	ASTM D7414*		16.7		
	Visc @ 100°C	cSt	ASTM D7279(m)		14.0		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : CU0021084 Lab Number : 02616887 Unique Number : 5733997 Test Package : MOB 1

Received : 21 Feb 2024 : 21 Feb 2024 **Tested** Diagnosed

: 22 Feb 2024 - Kevin Marson

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.

CUMMINS EASTERN CANADA LP

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