WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Area [101801]

C170165512

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		CU0021028		
	Sample Date		Client Info		21 Nov 2023		
	Machine Age	hrs	Client Info		478		
	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	Iron	ppm	ASTM D5185(m)	>90	2		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)	>20	0		
	Nickel	ppm	ASTM D5185(m)	>2	0		
	Titanium	ppm	ASTM D5185(m)	>2	0		
	Silver	ppm	ASTM D5185(m)		0		
	Aluminum	ppm	ASTM D5185(m)		2		
	Lead	ppm	ASTM D5185(m)		<1		
	Copper	ppm	ASTM D5185(m)		<1		
	Tin	ppm	ASTM D5185(m)	>15	0		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	VLITE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	nnm	ASTM D5185(m)	>25	3		
CONTAININATION	Potassium	ppm	ASTM D5185(m)		<1		
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	>0.2	NEG		
	Soot %	%	ASTM D7844*	~ 6	0		
	Nitration	Abs/cm	ASTM D7644*	>20	6.7		
	Sulfation	Abs/.1mm		>30	19.6		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance		Visual*	NORML	NORML		
	Odor	scalar		NORML	NORML		
	Emulsified Water			>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2		
	Boron	ppm	ASTM D5185(m)		44		
FLUID CONDITION The condition of the oil is acceptable for the time in service.	Boron Barium		ASTM D5185(m) ASTM D5185(m)	1	44 0		
	Boron Barium Molybdenum	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 49	44 0 46		
	Boron Barium Molybdenum Manganese	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 49 1	44 0 46 0		
	Boron Barium Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 49 1 616	44 0 46 0 761	 	
	Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185(m)	1 49 1 616 1554	44 0 46 0 761 1148	 	
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185(m)	1 49 1 616 1554 899	44 0 46 0 761 1148 710	 	
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	1 49 1 616 1554 899 1069	44 0 46 0 761 1148 710 795		
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	1 49 1 616 1554 899 1069 2624	44 0 46 0 761 1148 710	 	





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: CU0021028 Lab Number : 02616886 Unique Number : 5733996

Test Package : MOB 1 (Additional Tests: Visual)

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 21 Feb 2024 **Tested** : 21 Feb 2024 : 21 Feb 2024 - Wes Davis Diagnosed

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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