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

**NORMAL NORMAL NORMAL** 

[71395] SOURIS
Component
Diesel Engine

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.  Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.  Sample Dat Machine Ag Oil Age Filter Age Oil Changer Filter Chang Sample State Sample State Sample State Sta	e e hrs hrs hrs di leed leus ppm ppm ppm	Client Info Client Info Client Info Client Info Client Info Client Info Client Info		CU0022689 12 Jun 2024 230 0 0 Changed	CU0019887 02 Mar 2023 214 0 0	
brand, type, and viscosity of the oil on your next sample.  Machine Ag Oil Age Filter Age Oil Changer Filter Chang Sample Sta  WEAR  Metal levels are typical for a new component breaking in.  Metal levels are typical for a new component breaking in.  Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Yellow Metal  CONTAMINATION  There is no indication of any contamination in the oil.  Fuel Water	hrs	Client Info Client Info Client Info Client Info		230 0 0	214 0 0	
Machine Ag Oil Age Filter Age Oil Changer Filter Change Sample Sta  WEAR  Metal levels are typical for a new component breaking in.  Metal levels are typical for a new component breaking in.  Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Meta  CONTAMINATION  There is no indication of any contamination in the oil.  Fuel Water	hrs hrs ded led led ppm ppm ppm	Client Info Client Info Client Info		0	0	
Filter Age Oil Changes Filter Chang Sample Sta  WEAR  Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Meta  CONTAMINATION  There is no indication of any contamination in the oil.  Filter Age Oil Changes Filter Chang Sample Sta  Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Meta Fuel Water	hrs ded led led led led led led led led led	Client Info Client Info		0	0	
Oil Changer Filter Change Sample Sta  WEAR  Metal levels are typical for a new component breaking in.  Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Meta  CONTAMINATION  There is no indication of any contamination in the oil.  Fuel Water	ppm ppm	Client Info				
WEAR  Metal levels are typical for a new component breaking in.  Metal levels are typical for a new component breaking in.  Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Yellow Metal Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Water	ppm ppm			Changed	Channal	
WEAR  Metal levels are typical for a new component breaking in.  Metal levels are typical for a new component breaking in.  Nickel  Titanium  Silver  Aluminum  Lead  Copper  Tin  Vanadium  White Metal  Yellow Metal  CONTAMINATION  There is no indication of any contamination in the oil.  Sample Sta	ppm ppm ppm	Client Info			Changed	
Metal levels are typical for a new component breaking in.  Metal levels are typical for a new component breaking in.  Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Yellow Metal Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal There is no indication of any contamination in the oil.  Fuel Water	ppm ppm			Changed	Changed	
Metal levels are typical for a new component breaking in.  Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Yellow Metal CONTAMINATION There is no indication of any contamination in the oil.  Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Fuel Water	ppm			NORMAL	NORMAL	
Metal levels are typical for a new component breaking in.  Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Yellow Metal CONTAMINATION There is no indication of any contamination in the oil.  Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Fuel Water	ppm	ASTM D5185(m)	>100	3	4	
Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Meta Yellow Meta  CONTAMINATION There is no indication of any contamination in the oil.  Fuel Water	ppm	ASTM D5185(m)		0	0	
Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Yellow Metal There is no indication of any contamination in the oil.  Fuel Water		ASTM D5185(m)		<1	<1	
Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Yellow Metal Yellow Indication of any contamination in the oil.  Fuel Water	ppm	ASTM D5185(m)		0	<1	
Lead Copper Tin Vanadium White Metal Yellow Meta  CONTAMINATION Silicon Potassium Fuel Water	ppm	ASTM D5185(m)	>3	0	0	
Copper Tin Vanadium White Metal Yellow Meta  CONTAMINATION Silicon Potassium Fuel Water	ppm	ASTM D5185(m)	>20	1	1	
Tin Vanadium White Metal Yellow Metal Yellow Metal Yellow for the oil.  Silicon Potassium Fuel Water	ppm	ASTM D5185(m)	>40	<1	<1	
Vanadium White Metal Yellow Metal CONTAMINATION Silicon Potassium Fuel Water	ppm	ASTM D5185(m)	>330	25	8	
White Metal Yellow	ppm	ASTM D5185(m)	>15	0	<1	
Yellow Meta  CONTAMINATION  Silicon  Potassium  Fuel  Water	ppm	ASTM D5185(m)		0	0	
CONTAMINATION Silicon Potassium Fuel Water	scalar	Visual*	NONE	VLITE	NONE	
There is no indication of any contamination in the oil.  Potassium Fuel Water	l scalar	Visual*	NONE	NONE	NONE	
There is no indication of any contamination in the oil.  Fuel  Water	ppm	ASTM D5185(m)	>25	4	12	
Water	ppm	ASTM D5185(m)		<1	<1	
		WC Method	>5	<1.0	<1.0	
Glycol		WC Method	>0.2	NEG	NEG	
		WC Method		NEG	NEG	
Soot %	%	ASTM D7844*	>3	0	0	
Nitration	Abs/cm	ASTM D7624*	>20	7.9	6.8	
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.1	20.5	
Silt	scalar	Visual*	NONE	NONE	NONE	
Debris	scalar	Visual*	NONE	NONE	NONE	
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
Appearance	scalar	Visual*	NORML	NORML	NORML	
Odor	scalar	Visual*	NORML	NORML	NORML	
Emulsified W	ater scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION Sodium	ppm	ASTM D5185(m)		4	4	
Boron	ppm	ASTM D5185(m)		41	43	
The condition of the oil is acceptable for the time in service.  Barium	ppm	ASTM D5185(m)		<1	1	
Molybdenur	n ppm	ASTM D5185(m)		45	45	
Manganese	ppm	ASTM D5185(m)		<1	1	
Magnesium	ppm	ASTM D5185(m)		781	764	
Calcium	ppm	ASTM D5185(m)		1130	1215	
Phosphorus	ppm	ASTM D5185(m)		698	780	
Zinc	ppm	ASTM D5185(m)		854	829	
Sulfur	ppm	ASTM D5185(m)		1971	2016	
Oxidation	phili	ASTM D7414*	>25	19.5	15.5	





CALA ISO 17025:2017 Accredited Laboratory

Report Id: CUMFRE [WCAMIS] 02643339 (Generated: 06/21/2024 16:05:06) Rev: 1

Sample No.

Laboratory

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Lab Number : 02643339 Unique Number : 5800878

: CU0022689

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.

Received **Tested** Diagnosed Test Package : MOB 1 (Additional Tests: Visual)

: 21 Jun 2024 : 21 Jun 2024

: 21 Jun 2024 - Kevin Marson

Contact: Mark Allen mark.w.allen@cummins.com

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**CA E3C 2E7** 

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