

#### Area [149901] Machine Id 018011 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

## RECOMMENDATION

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition.

## WEAR

All component wear rates are normal.

### CONTAMINATION

Fuel content negligible. Test for glycol is positive. There is a high concentration of glycol present in the oil. There is a moderate concentration of water present in the oil.

# FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0022219		
Sample Date		Client Info		27 Sep 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		N/A		
Sample Status				SEVERE		
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Iron	ppm	ASTM D5185(m)	>90	48		
Chromium	ppm	ASTM D5185(m)	>20	1		
Nickel	ppm	ASTM D5185(m)	>2	<1		
Titanium	ppm	ASTM D5185(m)	>2	0		
Silver	ppm	ASTM D5185(m)	>2	0		
Aluminum	ppm	ASTM D5185(m)	>20	4		
Lead	ppm	ASTM D5185(m)	>40	7		
Copper	ppm	ASTM D5185(m)	>330	6		
Tin	ppm	ASTM D5185(m)	>15	<1		
Vanadium	ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Silicon	ppm	ASTM D5185(m)	>25	16		
Potassium	ppm	ASTM D5185(m)	>20	3		
Fuel	%	ASTM D7593*	>3.0	0.9		
Water	%	ASTM D6304*	>0.2	NEG		
Glycol	%	ASTM D7922*		0.137		
Soot %	%	ASTM D7844*	>6	2.7		
Nitration	Abs/cm	ASTM D7624*	>20	101.8		
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.3		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.2	<b>1</b> %		
Sodium			. 150	10		
Socium	ppm	ACTM DE105(III)	>100	13		
Boron	ppm		250	34		
Barium	ppm		100	1		
Molybdenum	ppm	ASTM D5185(m)	100	37		
Manganese	ppm	ASTM D5185(m)	450	<1		
Magnesium	ppm	ASTM D5185(m)	450	6/		
Calcium	ppm	ASTM D5185(m)	3000	3082		
Phosphorus	ppm	ASTM D5185(m)	1150	1197		
∠inc	ppm	ASTM D5185(m)	1350	1493		
Sultur	ppm	ASTM D5185(m)	4250	3720		
Oxidation	Abs/.1mm	ASTM D7414*	>25	163.0		
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	5.7		

WEAR

CONTAMINATION

FLUID CONDITION

NORMAL

**SEVERE** 

NORMAL



: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CUMMINS CANADA ULC - GENERATOR DIVISION Laboratory CALA Sample No. 7175 PACIFIC CIRCLE : CU0022219 Received : 28 Sep 2023 Ħ Lab Number : 02585801 MISSISSAUGA, ON Tested : 02 Oct 2023 ISO 17025:2017 Accredited CA L5T 2A5 Unique Number : 5646866 Diagnosed : 02 Oct 2023 - Kevin Marson Laboratory Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, KF, PercentFuel, Visual) Contact: Elisia Johnson To discuss this sample report, contact Customer Service at 1-800-268-2131. elisia.johnson@cummins.com Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (905)795-0050 Validity of results and interpretation are based on the sample and information as supplied. F: (905)795-9252