

Machine Id **74203656** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 15W40. Please confirm.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0023403		
Sample Date		Client Info		13 Jun 2024		
Machine Age	kms	Client Info		68639		
Oil Age	kms	Client Info		0		
Filter Age	kms	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		N/A		
Sample Status				NORMAL		
Iron	ppm	ASTM D5185(m)	>90	23		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>2	<1		
Titanium	ppm	ASTM D5185(m)	>2	<1		
Silver	ppm	ASTM D5185(m)	>2	<1		
Aluminum	ppm	ASTM D5185(m)	>20	13		
Lead	ppm	ASTM D5185(m)	>40	0		
Copper	ppm	ASTM D5185(m)	>330	1		
Tin	ppm	ASTM D5185(m)	>15	0		
Vanadium	ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	VLITE		
Silicon	ppm	ASTM D5185(m)	>25	10		
Potassium	ppm	ASTM D5185(m)	>20	22		
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	8.0		
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.7		
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	NEG		
			4 5 6	_		
Sodium	ppm	ASTM D5185(m)	>158	7		
Boron	ppm	ASTM D5185(m)		51		
Barium	ppm	ASTM D5185(m)	10	0		
Molybdenum	ppm	ASTM D5185(m)	100	52		
Manganese	ppm	ASTM D5185(m)	450	<1		
Magnesium	ppm	ASTM D5185(m)	450	717		
Calcium	ppm	ASTM D5185(m)	3000	1339		
Phosphorus	ppm	ASTM D5185(m)		803		
Zinc	ppm	ASTM D5185(m)	1350	951		
Sulfur	ppm	ASTM D5185(m)	4250	2244		
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.9		
Visc @ 40°C	cSt	ASTM D7279(m)	115	94.2		
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.0		
Viscosity Index (VI)	Scale	ASTM D2270*	126	135		

FLUID CONDITION

The condition of the oil is acceptable for the time in service.



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **CUMMINS EASTERN CANADA LP** CALA Sample No. Received 3189 SWANSEA CRESCENT : CU0023403 : 17 Jun 2024 ĥ Lab Number : 02642248 Tested OTTAWA, ON : 18 Jun 2024 ISO 17025:2017 Accredited : 18 Jun 2024 - Wes Davis CA K1G 3W5 Unique Number : 5799787 Diagnosed Laboratory Test Package : MOB 1 (Additional Tests: KV40, VI, Visual) Contact: Cindy Harrison To discuss this sample report, contact Customer Service at 1-800-268-2131. cindy.harrison@cummins.com T: (613)736-1146 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F: x: Validity of results and interpretation are based on the sample and information as supplied.

Contact/Location: Cindy Harrison - CUMOTT Page 2 of 2