

UNASSIGNED [104694]

6610

omponen **Diesel Engine**

VALVOLINE 15W40 (--- GAL)

VALVOLINE 15W40 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		CU0023405		
	Sample Date		Client Info		11 Jun 2024		
	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				NORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	>75	8		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>5	<1		
	Nickel	ppm	ASTM D5185(m)	>4	0		
	Titanium	ppm	ASTM D5185(m)	>2	0		
	Silver	ppm	ASTM D5185(m)	>2	0		
	Aluminum	ppm	ASTM D5185(m)	>15	2		
	Lead	ppm	ASTM D5185(m)		0		
	Copper	ppm	ASTM D5185(m)	>100	<1		
	Tin	ppm	ASTM D5185(m)	>4	0		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
	Silicon		ASTM D5185(m)	>25	3		
CONTAMINATION	Potassium	ppm			20		
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method	>20 >3.0	20 <1.0		
	Water		WC Method		<1.0 NEG		
	Glycol	%	ASTM D7922*	>0.2	0.0		
	Soot %	%	ASTM D7922 ASTM D7844*	>6	0.0		
	Nitration	Abs/cm	ASTM D7644 ASTM D7624*	>20	6.1		
	Sulfation	Abs/.1mm	ASTM D7024 ASTM D7415*	>30	19.4		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance		Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water		Visual*	>0.2	NEG		
			violal	20.L			
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		7		
The condition of the oil is acceptable for the time in service	Boron	ppm	ASTM D5185(m)	39	1		
The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		59		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)		947		
	Calcium	ppm	ASTM D5185(m)		1045		
	Phosphorus	ppm	ASTM D5185(m)		1013		
	Zinc	ppm	ASTM D5185(m)	1069	1187		
	Sulfur	ppm	ASTM D5185(m)		2591		
	Oxidation	Abs/.1mm	ASTM D7414*		13.9		
	Visc @ 40°C	cSt	ASTM D7279(m)		109		
	Visc @ 100°C	cSt	ASTM D7279(m)		14.7		
	Viceopity Index (V/I)	Ceele	ACTM D0070*	100	400		

Viscosity Index (VI) Scale ASTM D2270* 136

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Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **CUMMINS EASTERN CANADA LP** CALA Sample No. 3189 SWANSEA CRESCENT : CU0023405 Received : 13 Jun 2024 Lab Number : 02641581 OTTAWA, ON Tested : 14 Jun 2024 ISO 17025:2017 : 14 Jun 2024 - Wes Davis Accredited CA K1G 3W5 Unique Number : 5799120 Diagnosed Laboratory Test Package : MOB 1 (Additional Tests: Glycol, KV40, VI, Visual) Contact: Cindy Harrison cindy.harrison@cummins.com To discuss this sample report, contact Customer Service at 1-800-268-2131. 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