

WEAR	
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area [331084] Machine Id

A-I-C1

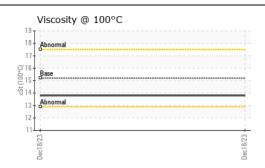
Component Diesel Engine

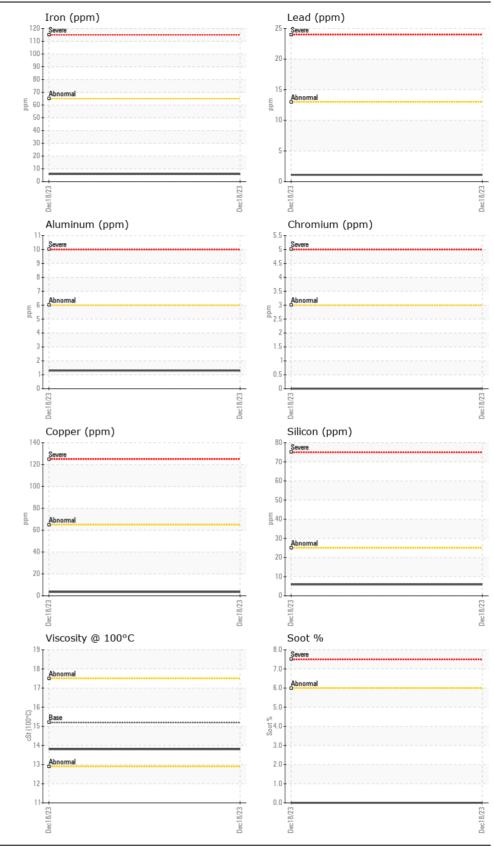
VALVOLINE PREMIUM BLUE 2000 15W40 (--- GAL)

VALVOLINE PREMIUM BLUE 2000 15W40 (GAL)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		CU0021976		
	Sample Date		Client Info		18 Dec 2023		
	Machine Age	hrs	Client Info		67		
	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 Metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185(m)	>65	6		
	Chromium	ppm	ASTM D5185(m)		0		
	Nickel	ppm	ASTM D5185(m)	>2	<1		
	Titanium	ppm	ASTM D5185(m)	>2	1		
	Silver	ppm	ASTM D5185(m)	>2	0		
	Aluminum	ppm	ASTM D5185(m)	>6	1		
	Lead	ppm	ASTM D5185(m)	>13	1		
	Copper	ppm	ASTM D5185(m)	>65	4		
	Tin	ppm	ASTM D5185(m)	>2	<1		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	6		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	1		
	Fuel	lele	WC Method	>3.0	<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>6	0		
	Nitration	Abs/cm	ASTM D7624*	>20	6.7		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	19.4		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	VLITE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance	scalar	Visual*	NORML	NORML		
	Odor	scalar	Visual*	NORML	NORML		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		3		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		36		
	Barium	ppm	ASTM D5185(m)		3		
	Molybdenum	ppm	ASTM D5185(m)		42		
	Manganese	ppm	ASTM D5185(m)		<1		
	Magnesium	ppm	ASTM D5185(m)		688		
	Calcium	ppm	ASTM D5185(m)		1625		
	Phosphorus	ppm	ASTM D5185(m)		770		
	Zinc	ppm	ASTM D5185(m)		870		
	Sulfur	ppm	ASTM D5185(m)		2335		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	16.6		
	1					4	

Visc @ 100°C cSt ASTM D7279(m) 15.2

13.8





CUMMINS EASTERN CANADA LP Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. Received : 20 Dec 2023 315 AV LIBERTE : CU0021976 Lab Number : 02604388 Tested : 20 Dec 2023 CANDIAC, QC ISO 17025:2017 Accredited Unique Number : 5697473 : 20 Dec 2023 - Wes Davis CA J5R 6Z7 Diagnosed Laboratory Test Package : MOB 1 (Additional Tests: Visual) Contact: Thomas Owens To discuss this sample report, contact Customer Service at 1-800-268-2131. is275@cummins.com T: (450)638-6863 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. F: (450)638-1202