WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Area

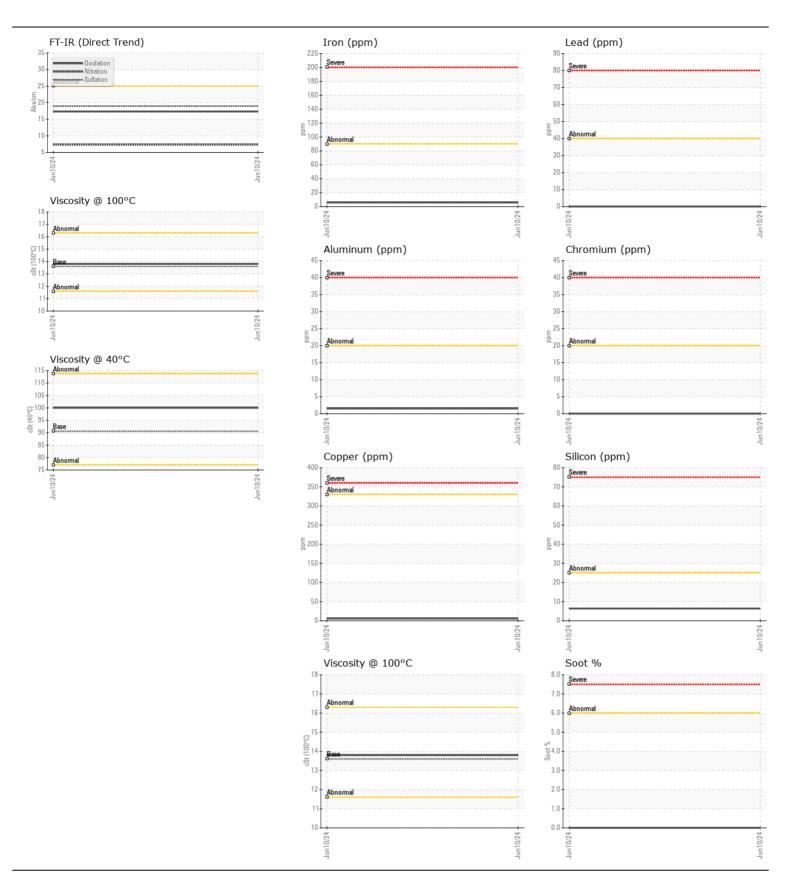
CN BRAMPTON [156653]

NO UNIT CU0022783

Diesel Engine

VALVOLINE 15W40 (--- GAL)

VALVOLINE 13VV40 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		CU0022783		
	Sample Date		Client Info		10 Jun 2024		
	Machine Age	hrs	Client Info		63		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR Metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185(m)	>90	6		
	Chromium	ppm	ASTM D5185(m)	>20	0		
	Nickel	ppm	ASTM D5185(m)	>2	0		
	Titanium	ppm	ASTM D5185(m)	>2	24		
	Silver	ppm	ASTM D5185(m)	>2	0		
	Aluminum	ppm	ASTM D5185(m)	>20	2		
	Lead	ppm	ASTM D5185(m)	>40	0		
	Copper	ppm	ASTM D5185(m)		6		
	Tin	ppm	ASTM D5185(m)	>15	0		
	Vanadium	ppm	ASTM D5185(m)		<1		
	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		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	7.3		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	18.9		
	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		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		4		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	39	42		
	Barium	ppm	ASTM D5185(m)		<1		
	Molybdenum	ppm	ASTM D5185(m)		47		
	Manganese	ppm	ASTM D5185(m)		<1		
	Magnesium	ppm	ASTM D5185(m)		539		
	Calcium	ppm	ASTM D5185(m)		1516		
	Phosphorus	ppm	ASTM D5185(m)		737		
	Zinc	ppm	ASTM D5185(m)		865		
	Sulfur	ppm	ASTM D5185(m)		2055		
	Oxidation	Abs/.1mm	ASTM D7414*		17.3		
	Visc @ 40°C	cSt	ASTM D7279(m)		100		
	Visc @ 100°C	cSt	. ,		13.8		
	Viscosity Index (VI)	Scale	ASTM D2270*	136	139		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CUMMINS CANADA ULC - GENERATOR DIVISION : CU0022783 Lab Number : 02642277

Unique Number : 5799816

Received **Tested** Diagnosed

: 18 Jun 2024 Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

: 18 Jun 2024 - Wes Davis

: 17 Jun 2024

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.

CA L5T 2A5

7175 PACIFIC CIRCLE

MISSISSAUGA, ON

F: (905)795-9252