



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[331084]
 Machine Id
A-I-B1
 Component
Diesel Engine
 Fluid
VALVOLINE PREMIUM BLUE 2000 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0021979	---	---
Sample Date		Client Info		18 Dec 2023	---	---
Machine Age	hrs	Client Info		54	---	---
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)	>90	6	---	---
Chromium	ppm	ASTM D5185(m)	>20	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)	>20	1	---	---
Lead	ppm	ASTM D5185(m)	>40	1	---	---
Copper	ppm	ASTM D5185(m)	>330	12	---	---
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	---	---

CONTAMINATION

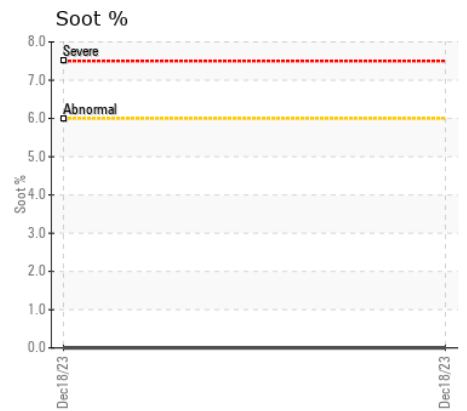
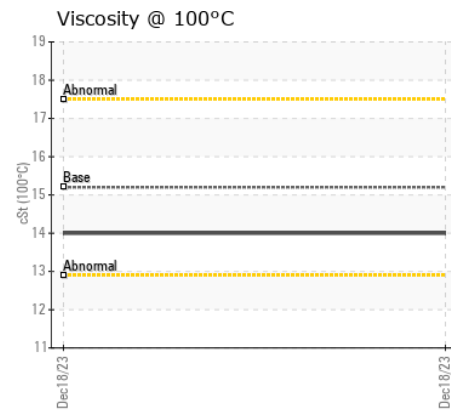
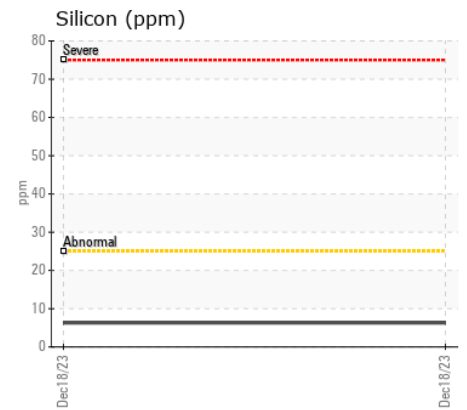
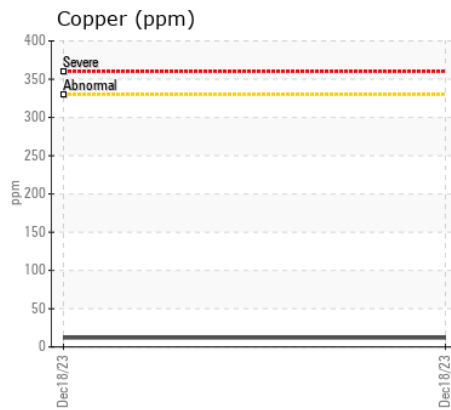
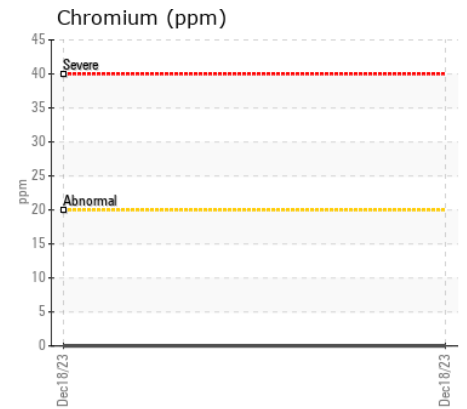
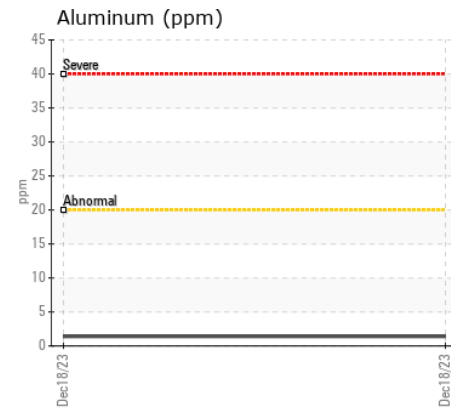
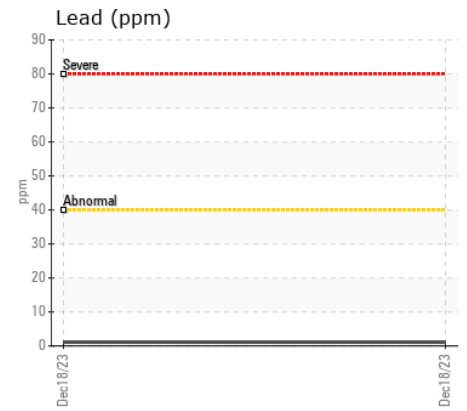
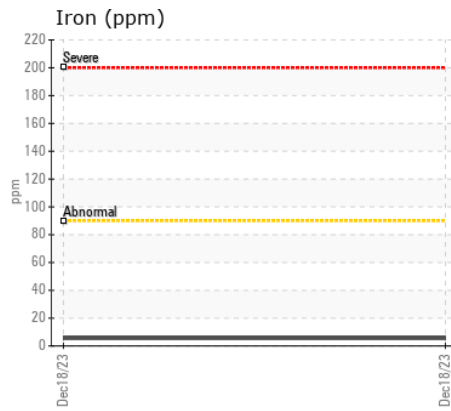
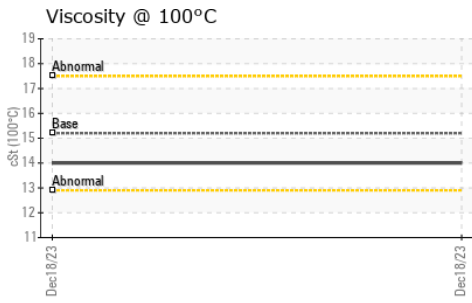
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	---	---
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	6.8	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.5	---	---
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

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

Sodium	ppm	ASTM D5185(m)		4	---	---
Boron	ppm	ASTM D5185(m)		39	---	---
Barium	ppm	ASTM D5185(m)		3	---	---
Molybdenum	ppm	ASTM D5185(m)		44	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)		708	---	---
Calcium	ppm	ASTM D5185(m)		1627	---	---
Phosphorus	ppm	ASTM D5185(m)		782	---	---
Zinc	ppm	ASTM D5185(m)		880	---	---
Sulfur	ppm	ASTM D5185(m)		2350	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.8	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.2	14.0	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0021979 **Received** : 20 Dec 2023
Lab Number : 02604385 **Tested** : 20 Dec 2023
Unique Number : 5697470 **Diagnosed** : 20 Dec 2023 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

CUMMINS EASTERN CANADA LP
 315 AV LIBERTE
 CANDIAC, QC
 CA J5R 6Z7
 Contact: Thomas Owens
 is275@cummins.com
 T: (450)638-6863
 F: (450)638-1202

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 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.