



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[331084]

Machine Id

A-I-A1

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		CU0022034	---	---
Sample Date		Client Info		18 Dec 2023	---	---
Machine Age	hrs	Client Info		57	---	---
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	5	---	---
Chromium	ppm	ASTM D5185(m)	>3	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	2	---	---
Lead	ppm	ASTM D5185(m)	>13	1	---	---
Copper	ppm	ASTM D5185(m)	>65	6	---	---
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

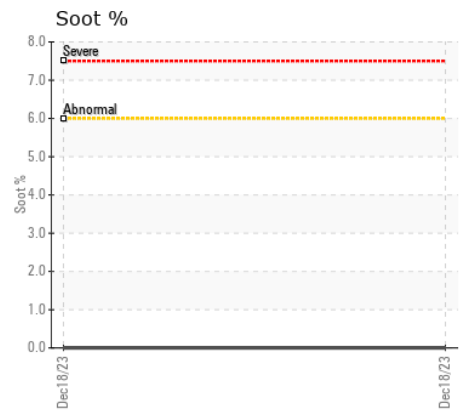
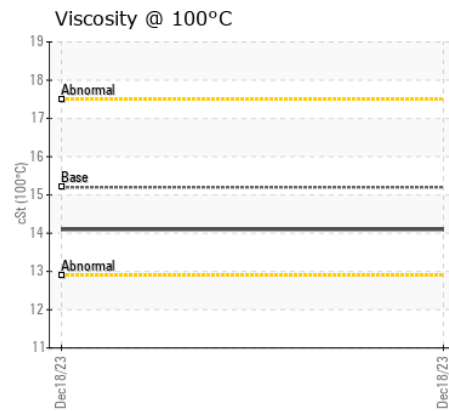
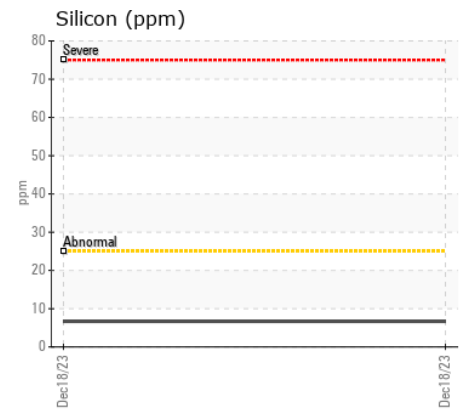
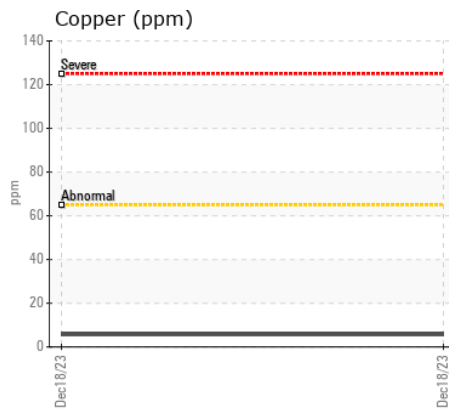
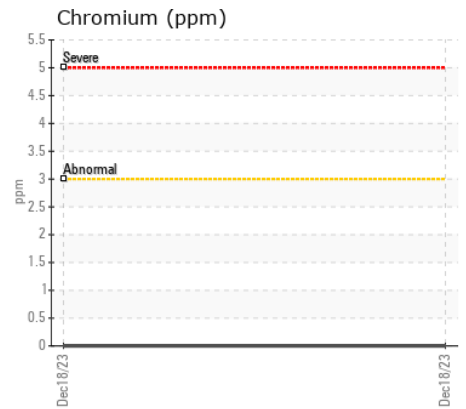
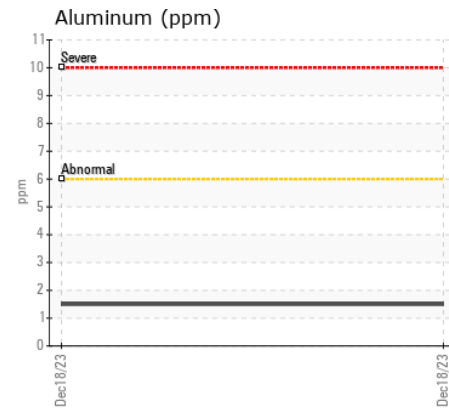
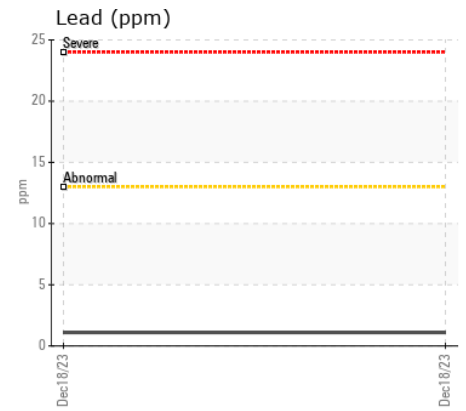
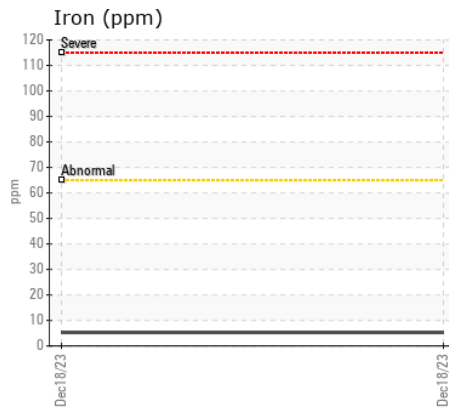
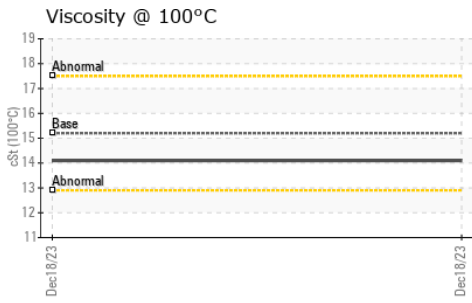
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	7	---	---
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	7.0	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.4	---	---
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)		3	---	---
Boron	ppm	ASTM D5185(m)		38	---	---
Barium	ppm	ASTM D5185(m)		3	---	---
Molybdenum	ppm	ASTM D5185(m)		45	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)		719	---	---
Calcium	ppm	ASTM D5185(m)		1596	---	---
Phosphorus	ppm	ASTM D5185(m)		783	---	---
Zinc	ppm	ASTM D5185(m)		875	---	---
Sulfur	ppm	ASTM D5185(m)		2340	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.1	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.2	14.1	---	---



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0022034
Lab Number : 02604393
Unique Number : 5697478
Test Package : MOB 1 (Additional Tests: Visual)

Received : 20 Dec 2023
Tested : 20 Dec 2023
Diagnosed : 20 Dec 2023 - Wes Davis

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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.