



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[152962]

Machine Id

1884 GEN 1

Component

Diesel Engine

Fluid

VALVOLINE PREMIUM BLUE EXTREME 5W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0022467	CU0021817	CU0019548
Sample Date		Client Info		16 Jan 2024	21 Sep 2023	23 May 2023
Machine Age	hrs	Client Info		2022	1195	584
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	28	23	27
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	1	2
Lead	ppm	ASTM D5185(m)	>40	2	4	5
Copper	ppm	ASTM D5185(m)	>330	5	52	98
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

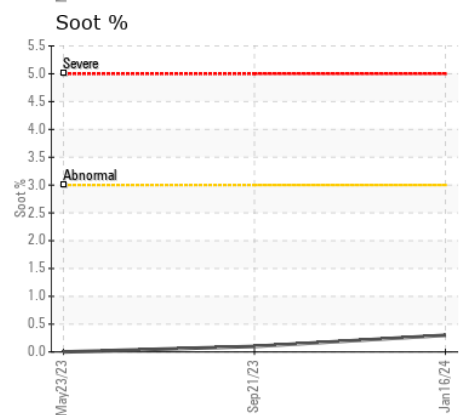
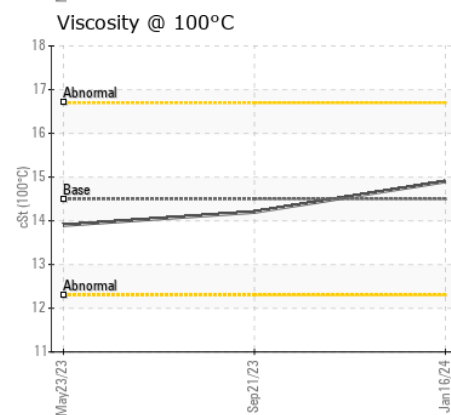
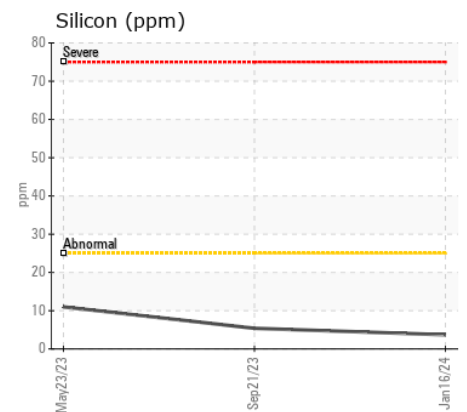
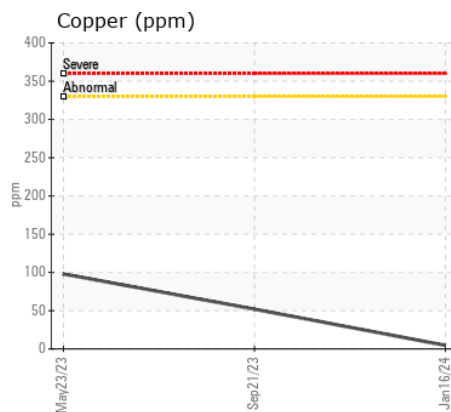
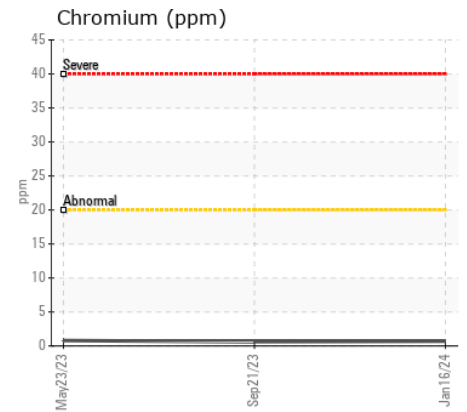
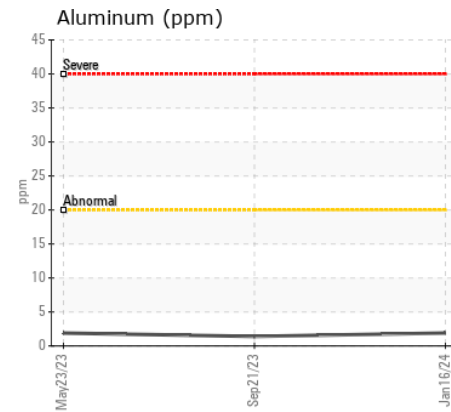
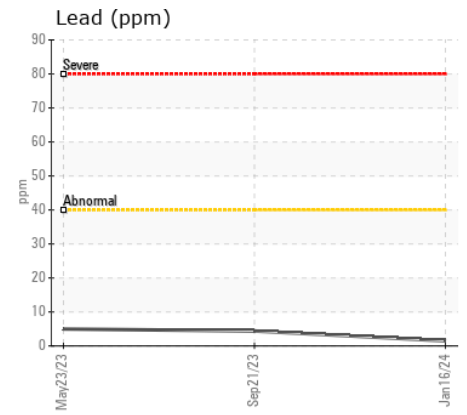
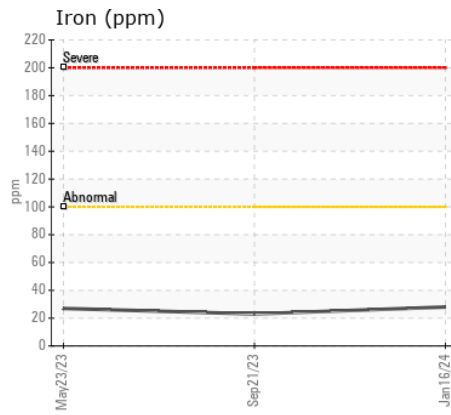
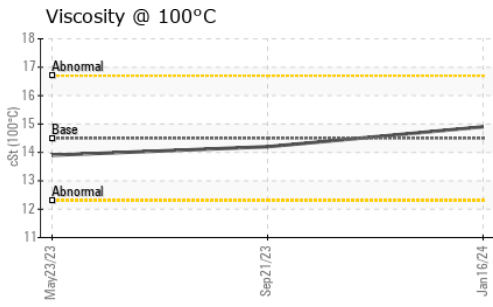
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	5	11
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.3	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	12.9	12.0	11.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.0	23.8	22.9
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		4	6	6
Boron	ppm	ASTM D5185(m)		30	29	41
Barium	ppm	ASTM D5185(m)		0	1	5
Molybdenum	ppm	ASTM D5185(m)		64	65	57
Manganese	ppm	ASTM D5185(m)		0	<1	4
Magnesium	ppm	ASTM D5185(m)		1117	1086	1025
Calcium	ppm	ASTM D5185(m)		931	907	943
Phosphorus	ppm	ASTM D5185(m)		993	961	931
Zinc	ppm	ASTM D5185(m)		1227	1198	1085
Sulfur	ppm	ASTM D5185(m)		2703	2475	2321
Oxidation	Abs/.1mm	ASTM D7414*	>25	31.0	26.0	23.9
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	14.9	14.2	13.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CUMMINS CANADA ULC - GENERATOR DIVISION
Sample No. : CU0022467 **Received** : 22 Jan 2024 7175 PACIFIC CIRCLE
Lab Number : 02610144 **Diagnosed** : 22 Jan 2024 MISSISSAUGA, ON
Unique Number : 5711230 **Diagnostician** : Kevin Marson CA L5T 2A5
Test Package : MOB 1

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.

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