



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[152962]

Machine Id
1884 GEN 2

Component
Diesel Engine

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

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0022450	CU0021843	CU0019547
Sample Date		Client Info		10 Jan 2024	21 Sep 2023	23 May 2023
Machine Age	hrs	Client Info		2032	1204	619
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	31	27	30
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	<1
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	1	3	6
Copper	ppm	ASTM D5185(m)	>330	9	27	104
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

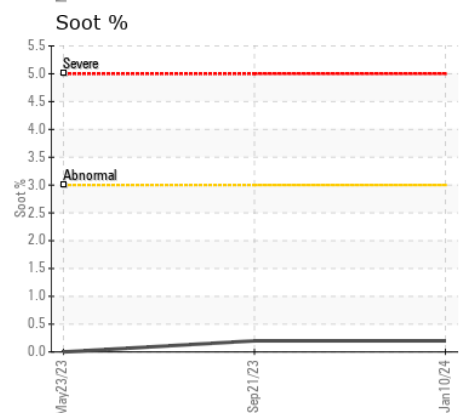
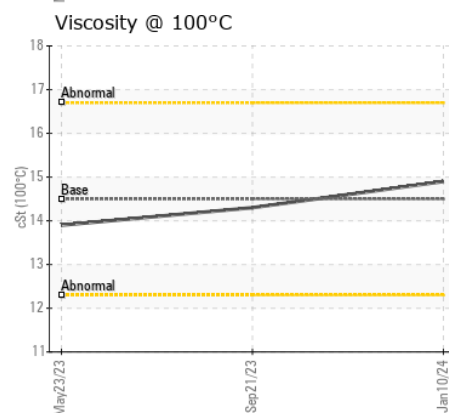
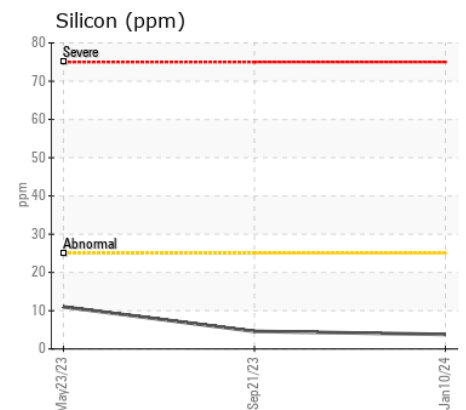
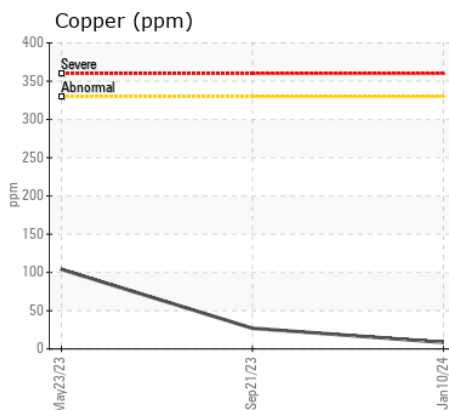
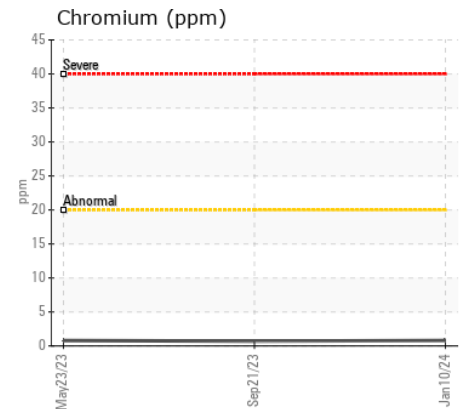
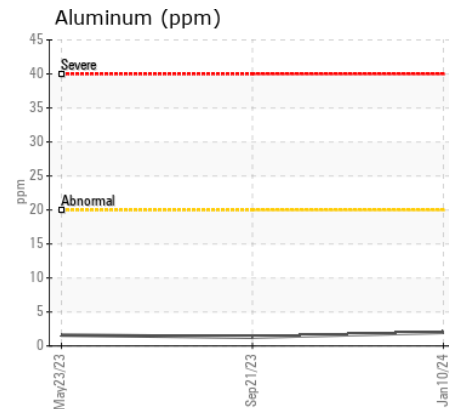
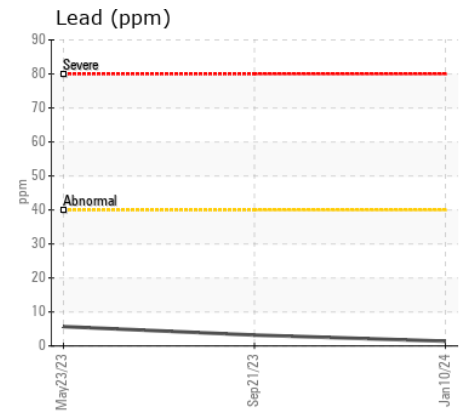
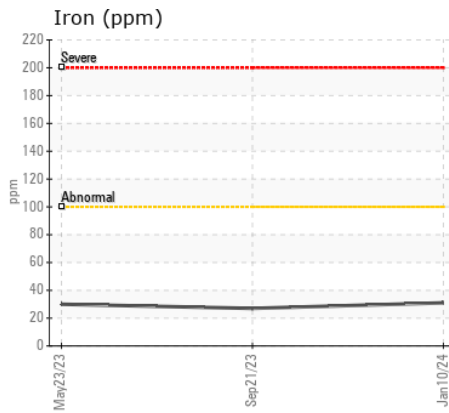
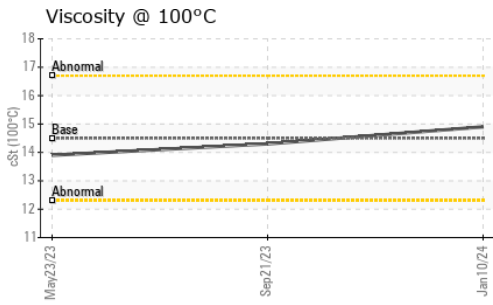
There is no indication of any contamination in the oil.

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	0.2	0.2	0
Nitration	Abs/cm	ASTM D7624*	>20	13.5	12.4	12.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.5	24.3	23.1
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)		5	5	6
Boron	ppm	ASTM D5185(m)		30	28	40
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)		1132	1082	1038
Calcium	ppm	ASTM D5185(m)		884	890	942
Phosphorus	ppm	ASTM D5185(m)		1004	951	947
Zinc	ppm	ASTM D5185(m)		1242	1182	1102
Sulfur	ppm	ASTM D5185(m)		2712	2425	2327
Oxidation	Abs/.1mm	ASTM D7414*	>25	32.6	26.8	25.0
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	14.9	14.3	13.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CUMMINS CANADA ULC - GENERATOR DIVISION
Sample No. : CU0022450 **Received** : 22 Jan 2024 7175 PACIFIC CIRCLE
Lab Number : 02610210 **Diagnosed** : 23 Jan 2024 MISSISSAUGA, ON
Unique Number : 5711296 **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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