



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**60084**  
Component  
**Diesel Engine**  
Fluid  
**VALVOLINE 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0887300</b>	WC0887257	WC0809094
Sample Date		Client Info		<b>12 Mar 2024</b>	07 Dec 2023	23 Aug 2023
Machine Age	kms	Client Info		<b>94783</b>	73072	48575
Oil Age	kms	Client Info		<b>10000</b>	10000	10000
Filter Age	kms	Client Info		<b>10000</b>	10000	10000
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>75	<b>11</b>	17	18
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	1
Aluminum	ppm	ASTM D5185(m)	>15	<b>1</b>	2	1
Lead	ppm	ASTM D5185(m)	>25	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>100	<b>2</b>	3	4
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

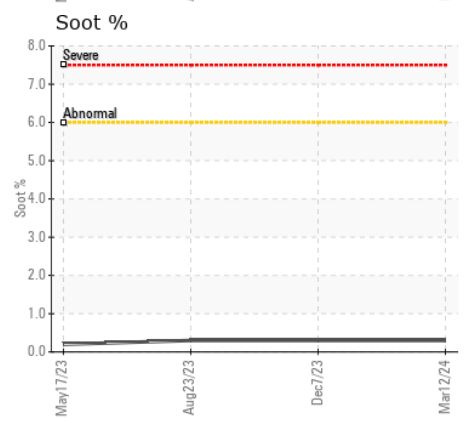
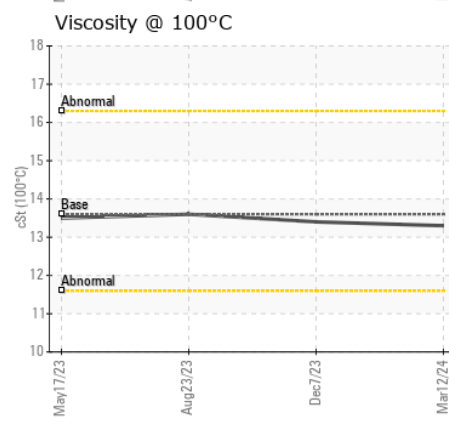
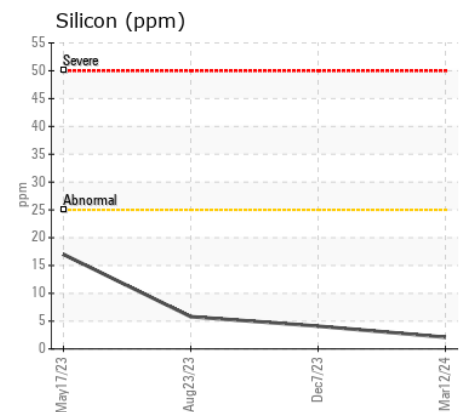
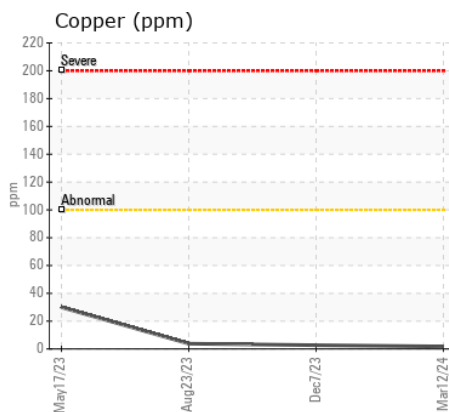
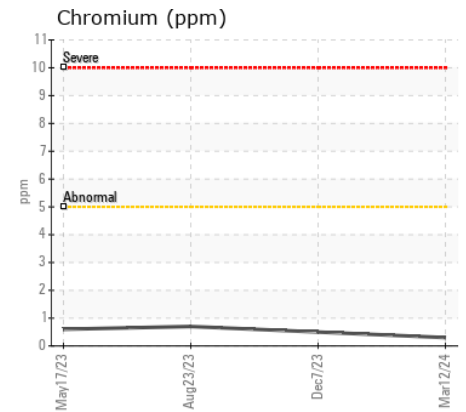
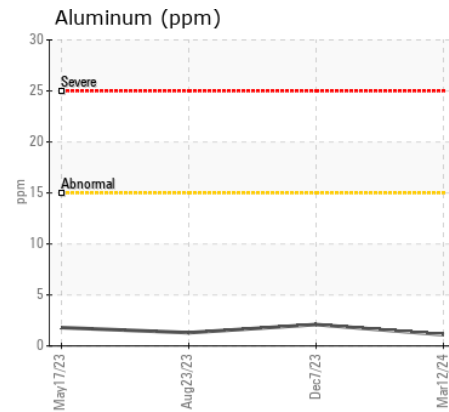
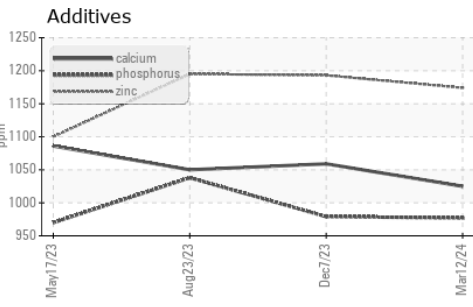
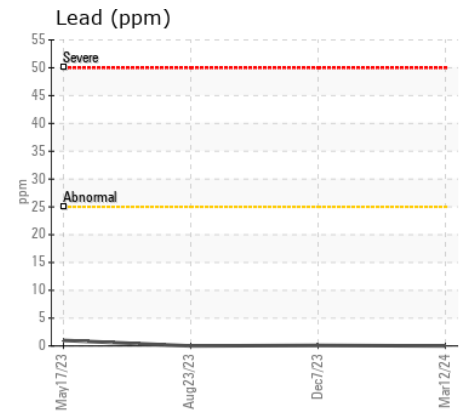
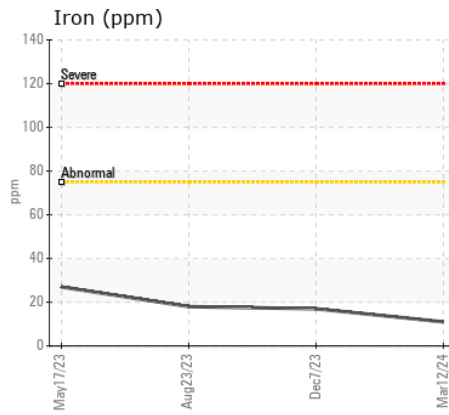
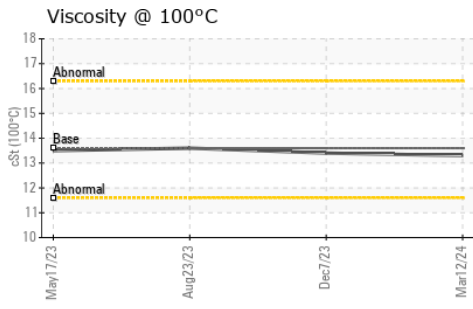
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	4	6
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>6	<b>0.3</b>	0.3	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.0</b>	8.4	8.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.1</b>	19.5	21.5
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<b>4</b>	5	6
Boron	ppm	ASTM D5185(m)	39	<b>2</b>	3	3
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	49	<b>58</b>	60	58
Manganese	ppm	ASTM D5185(m)	1	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	616	<b>970</b>	967	971
Calcium	ppm	ASTM D5185(m)	1554	<b>1025</b>	1059	1050
Phosphorus	ppm	ASTM D5185(m)	899	<b>977</b>	979	1038
Zinc	ppm	ASTM D5185(m)	1069	<b>1174</b>	1193	1195
Sulfur	ppm	ASTM D5185(m)	2624	<b>2469</b>	2496	2499
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.4</b>	16.6	17.3
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	<b>13.3</b>	13.4	13.6



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0887300  
**Lab Number** : 02625515  
**Unique Number** : 5750634  
**Test Package** : MOB 1  
**Received** : 01 Apr 2024  
**Tested** : 01 Apr 2024  
**Diagnosed** : 01 Apr 2024 - Wes Davis

**CITY OF PETERBOROUGH**  
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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.