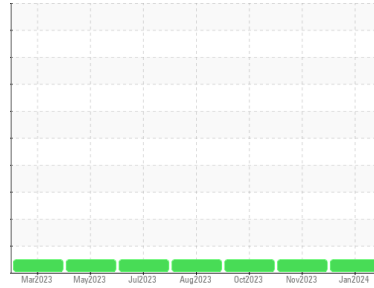




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id

2216

Component

Natural Gas Engine

Fluid

VALVOLINE PREMIUM BLUE 9200 15W40 (--- GAL)

DIAGNOSIS

Recommendation

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

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0890962	WC0878065	WC0849767
Sample Date	Client Info		09 Jan 2024	20 Nov 2023	05 Oct 2023
Machine Age	kms	Client Info	58598	49996	43062
Oil Age	kms	Client Info	0	0	0
Oil Changed	Client Info		Changed	N/A	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	7	8	8
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>9	1	1	1
Lead	ppm	ASTM D5185(m)	>30	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>35	<1	<1	1
Tin	ppm	ASTM D5185(m)	>4	<1	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		18	22	10
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		52	52	55
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		786	830	791
Calcium	ppm	ASTM D5185(m)		1215	1236	1241
Phosphorus	ppm	ASTM D5185(m)		687	744	647
Zinc	ppm	ASTM D5185(m)		855	886	881
Sulfur	ppm	ASTM D5185(m)		2067	1978	1949
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>+100	3	6	5
Sodium	ppm	ASTM D5185(m)		3	3	2
Potassium	ppm	ASTM D5185(m)	>20	0	0	0

INFRA-RED

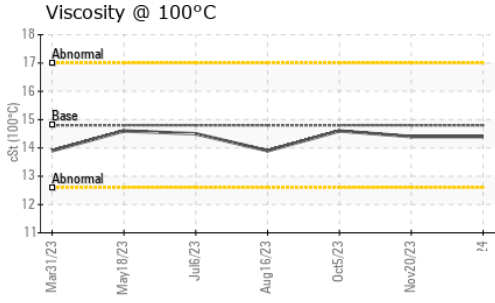
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	11.1	10.8	11.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.7	21.6	22.3

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.6	18.7	20.3



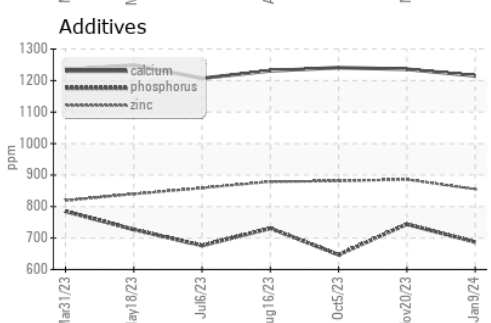
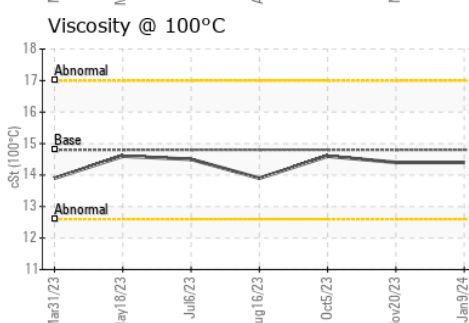
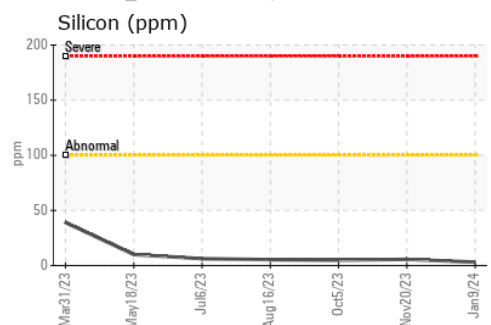
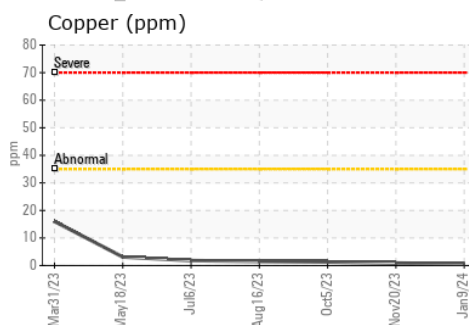
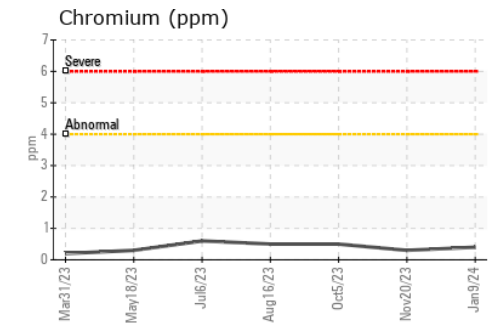
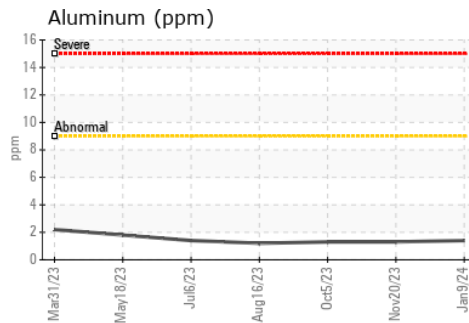
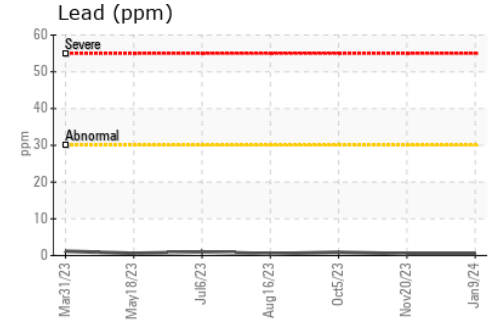
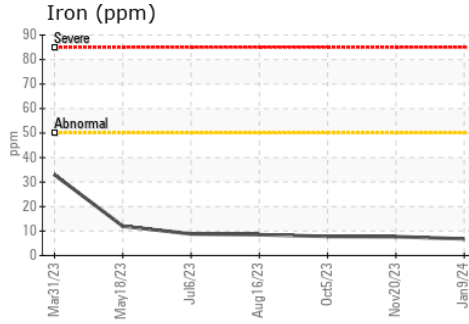
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.8	14.4	14.4

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0890962 **Received** : 16 Jan 2024
Lab Number : 02608927 **Diagnosed** : 16 Jan 2024
Unique Number : 5710013 **Diagnostician** : Wes Davis
Test Package : MOB 1

CITY OF HAMILTON
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 MOUNT HOPE, ON
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 Contact: Cliff Bird
 cliff.bird@hamilton.ca
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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.