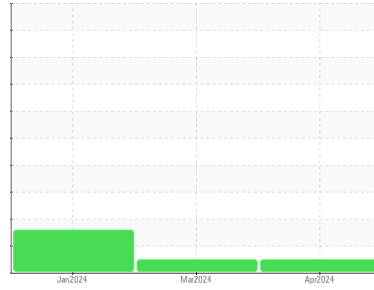




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

2279

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			WC0917553	WC0878004	WC0890914
Sample Date	Client Info			10 Apr 2024	19 Mar 2024	20 Jan 2024
Machine Age	kms	Client Info		21190	16817	11904
Oil Age	kms	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method	>0.1		NEG	NEG	NEG
Glycol	WC Method			---	---	0.0

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	6	11	37
Chromium	ppm	ASTM D5185(m)	>4	0	0	<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	0	0
Aluminum	ppm	ASTM D5185(m)	>9	1	1	3
Lead	ppm	ASTM D5185(m)	>30	0	0	<1
Copper	ppm	ASTM D5185(m)	>35	<1	2	14
Tin	ppm	ASTM D5185(m)	>4	0	0	<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)		27	25	17
Barium	ppm	ASTM D5185(m)		0	<1	3
Molybdenum	ppm	ASTM D5185(m)		51	50	55
Manganese	ppm	ASTM D5185(m)		<1	0	9
Magnesium	ppm	ASTM D5185(m)		813	762	764
Calcium	ppm	ASTM D5185(m)		1217	1128	1235
Phosphorus	ppm	ASTM D5185(m)		712	681	678
Zinc	ppm	ASTM D5185(m)		839	820	850
Sulfur	ppm	ASTM D5185(m)		1942	1867	2089
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

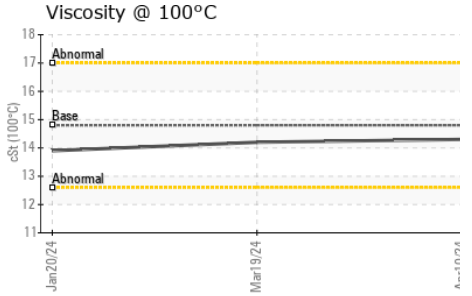
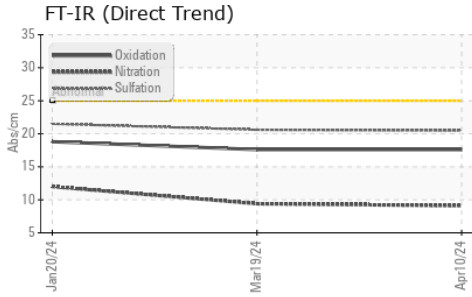
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	4	6	33
Sodium	ppm	ASTM D5185(m)		2	3	5
Potassium	ppm	ASTM D5185(m)	>20	0	<1	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	9.1	9.4	12.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.5	20.6	21.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.6	17.6	18.8



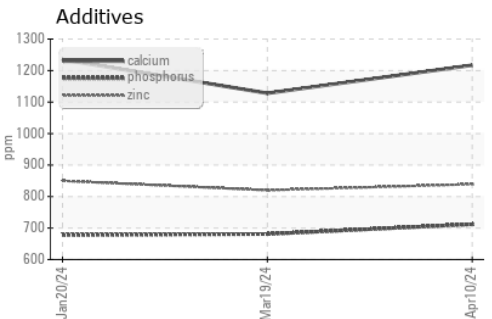
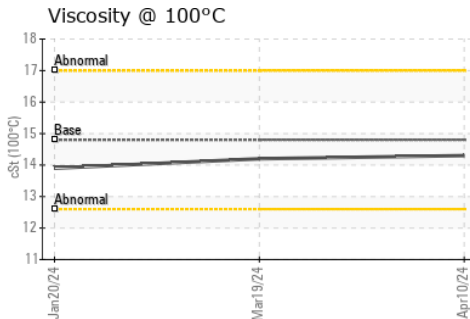
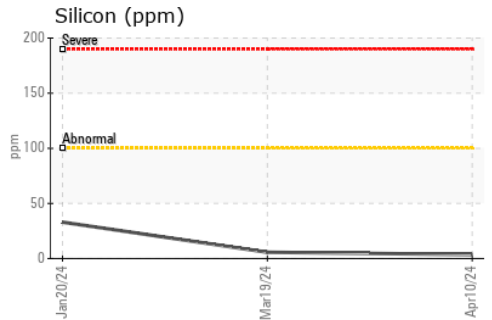
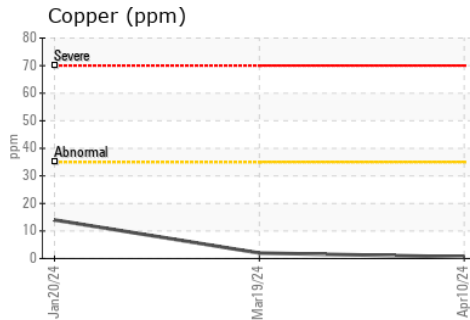
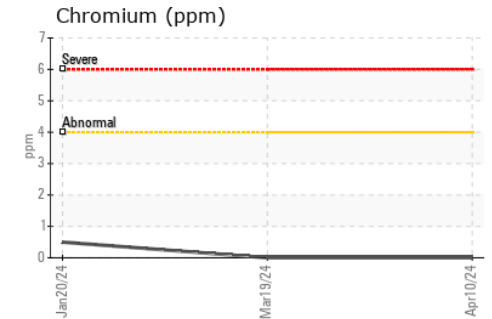
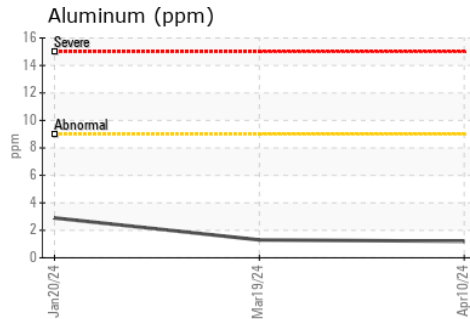
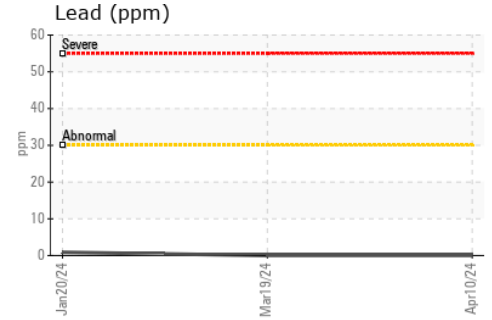
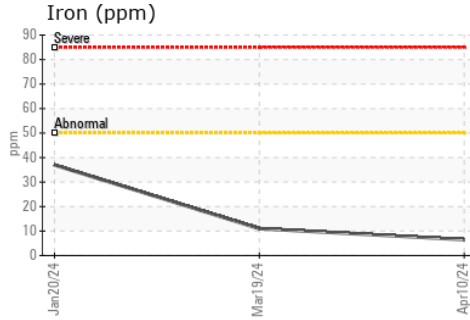
OIL ANALYSIS REPORT



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	14.2	13.9

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0917553
Lab Number : 02629182
Unique Number : 5762314
Test Package : MOB 1

Received : 16 Apr 2024
Tested : 17 Apr 2024
Diagnosed : 17 Apr 2024 - Wes Davis

CITY OF HAMILTON
 2200 UPPER JAMES., MOUNTAIN TRANSIT STOREROOM
 MOUNT HOPE, ON
 CA L0R 1W0
 Contact: Jeff Parr
 jeff.parr@hamilton.ca
 T: (905)546-2424
 F: (905)679-4502

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.