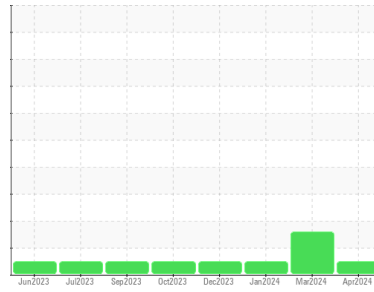




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

2229

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		WC0917656	WC0878024	WC0890981
Sample Date	Client Info		13 Apr 2024	06 Mar 2024	19 Jan 2024
Machine Age	kms	Client Info	73755	65177	55239
Oil Age	kms	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	Changed
Sample Status			NORMAL	ABNORMAL	NORMAL

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	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	0
Aluminum	ppm	ASTM D5185(m)	>9	1	1	1
Lead	ppm	ASTM D5185(m)	>30	0	<1	<1
Copper	ppm	ASTM D5185(m)	>35	2	1	1
Tin	ppm	ASTM D5185(m)	>4	0	<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)		15	25	15
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		55	55	55
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)		845	834	803
Calcium	ppm	ASTM D5185(m)		1273	1232	1272
Phosphorus	ppm	ASTM D5185(m)		692	734	678
Zinc	ppm	ASTM D5185(m)		877	871	892
Sulfur	ppm	ASTM D5185(m)		1967	2070	2137
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

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

INFRA-RED

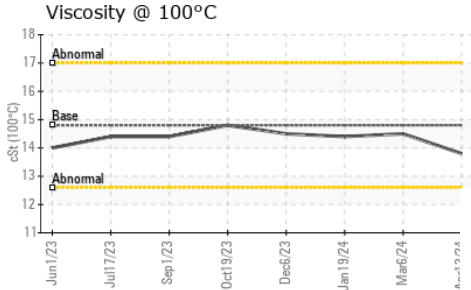
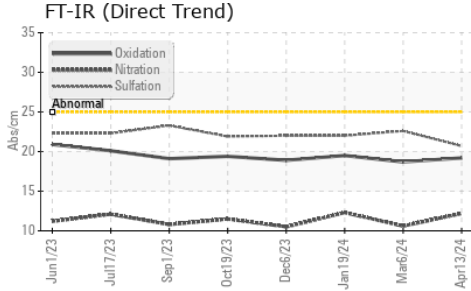
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.2	10.6	12.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.7	22.6	22.0

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.2	18.7	19.5



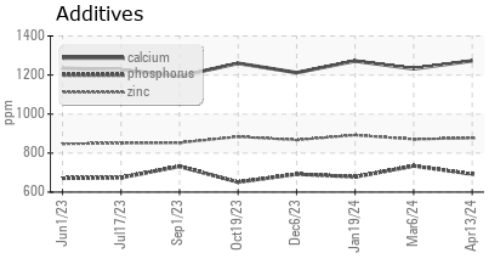
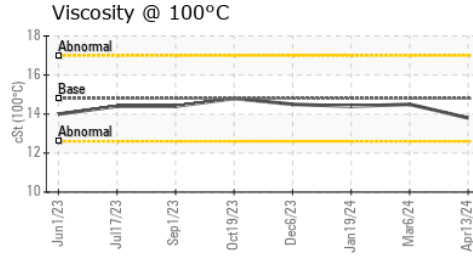
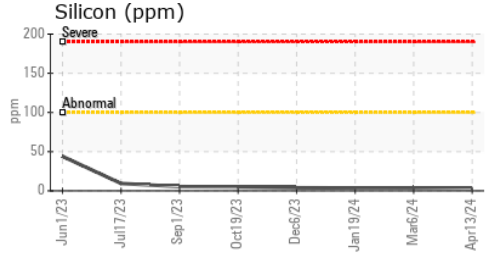
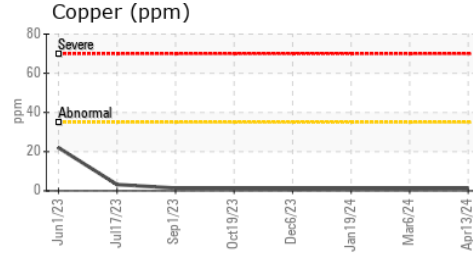
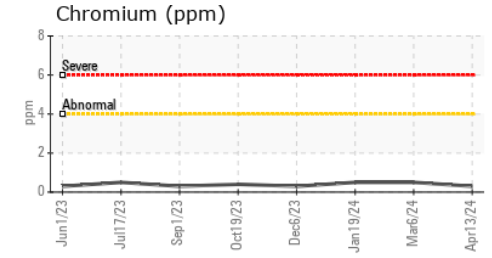
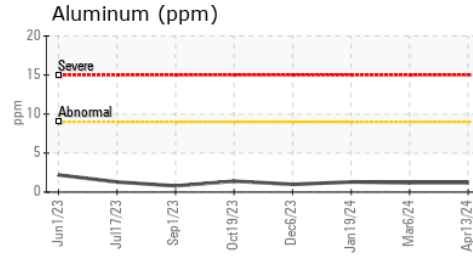
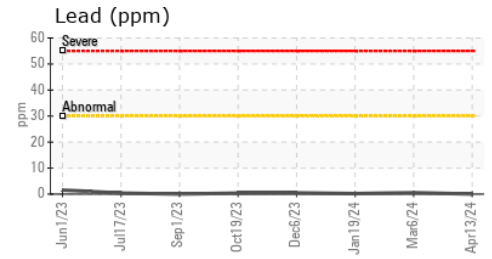
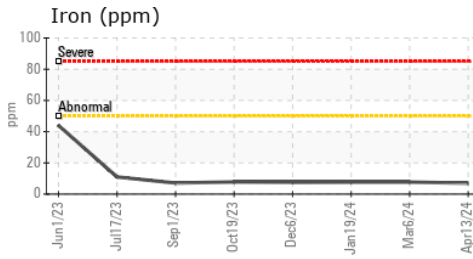
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	---	NONE
Yellow Metal	scalar	Visual*	NONE	---	NONE
Precipitate	scalar	Visual*	NONE	---	NONE
Silt	scalar	Visual*	NONE	---	NONE
Debris	scalar	Visual*	NONE	---	NONE
Sand/Dirt	scalar	Visual*	NONE	---	NONE
Appearance	scalar	Visual*	NORML	---	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG ▲ .2%	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.8	13.8	14.5

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0917656 **Received** : 16 Apr 2024
Lab Number : 02629181 **Tested** : 17 Apr 2024
Unique Number : 5762313 **Diagnosed** : 17 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

CITY OF HAMILTON
 2200 UPPER JAMES., MOUNTAIN TRANSIT STOREROOM
 MOUNT HOPE, ON
 CA L0R 1W0
 Contact: Ron Skinner
 ron.skinner@hamilton.ca

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.

F: (905)679-4502