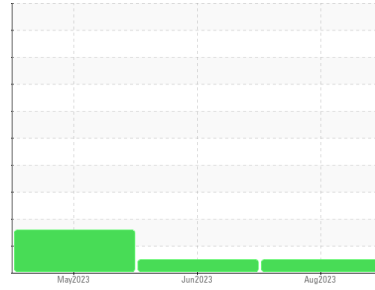




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
2223
 Component
Natural Gas Engine
 Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

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			WC0830157	WC0791507	WC0791356
Sample Date	Client Info			05 Aug 2023	28 Jun 2023	17 May 2023
Machine Age	kms	Client Info		0	15410	0
Oil Age	kms	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	10	14	37
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	<1	<1
Titanium	ppm	ASTM D5185(m)		<1	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>9	1	2	2
Lead	ppm	ASTM D5185(m)	>30	<1	<1	1
Copper	ppm	ASTM D5185(m)	>35	<1	3	17
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)		16	10	20
Barium	ppm	ASTM D5185(m)		0	<1	3
Molybdenum	ppm	ASTM D5185(m)		50	50	49
Manganese	ppm	ASTM D5185(m)		<1	2	12
Magnesium	ppm	ASTM D5185(m)		769	780	754
Calcium	ppm	ASTM D5185(m)		1169	1190	1239
Phosphorus	ppm	ASTM D5185(m)		702	640	759
Zinc	ppm	ASTM D5185(m)		816	812	819
Sulfur	ppm	ASTM D5185(m)		1926	1890	2017
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	6	12	▲ 45
Sodium	ppm	ASTM D5185(m)		2	2	4
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	11.0	11.9	10.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.3	21.5	20.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.5	19.9	19.0

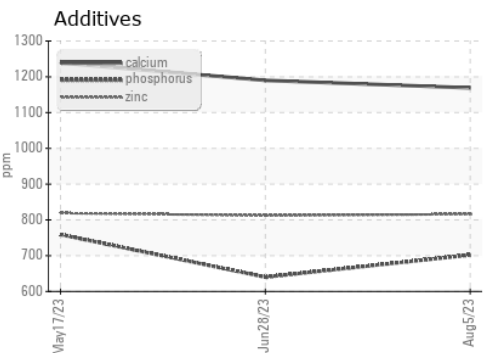
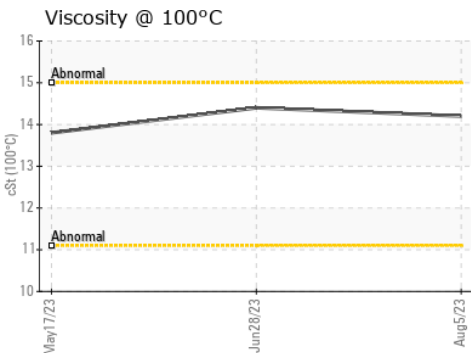
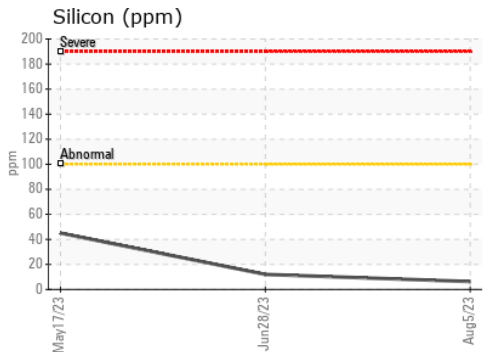
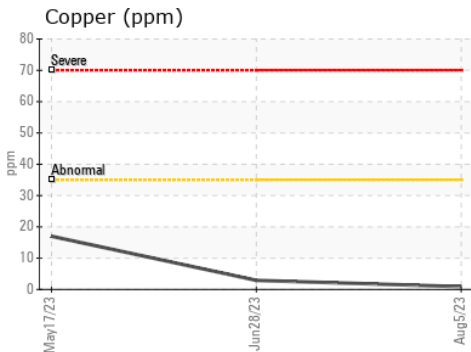
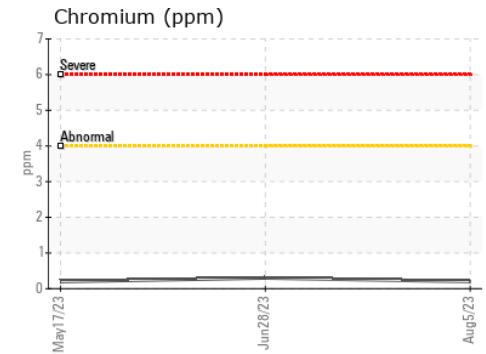
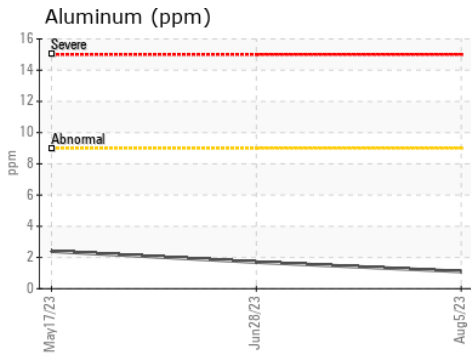
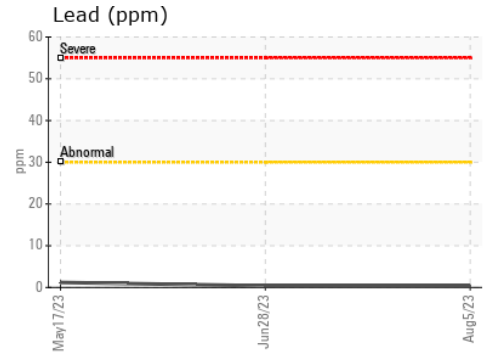
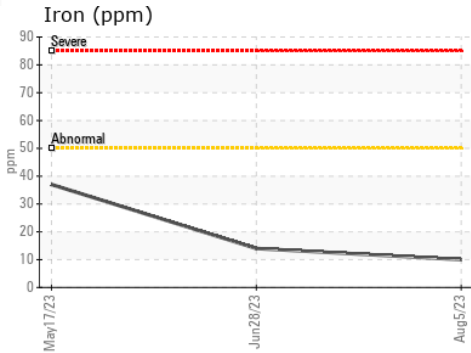
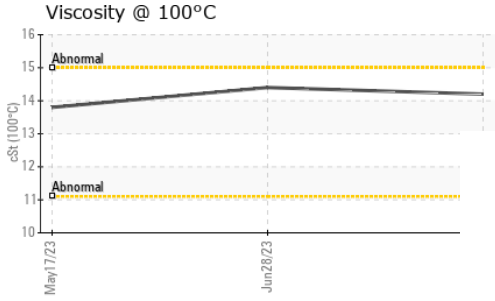
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG



OIL ANALYSIS REPORT

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)		14.2	14.4	13.8

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0830157 **Received** : 14 Aug 2023
Lab Number : 02575667 **Diagnosed** : 14 Aug 2023
Unique Number : 5620718 **Diagnostician** : Wes Davis
Test Package : MOB 1

CITY OF HAMILTON
 2200 UPPER JAMES., MOUNTAIN TRANSIT STOREROOM
 MOUNT HOPE, ON
 CA L0R 1W0
 Contact: Cliff Bird
 cliff.bird@hamilton.ca
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 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.