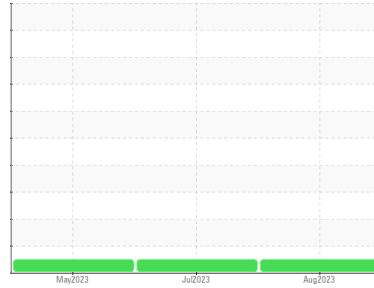




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
2221
 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			WC0830136	WC0830351	WC0791240
Sample Date	Client Info			18 Aug 2023	06 Jul 2023	18 May 2023
Machine Age	kms	Client Info		0	15166	10505
Oil Age	kms	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	7	12	51
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	0	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	1	3
Lead	ppm	ASTM D5185(m)	>30	<1	<1	1
Copper	ppm	ASTM D5185(m)	>35	1	3	22
Tin	ppm	ASTM D5185(m)	>4	<1	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)		18	21	15
Barium	ppm	ASTM D5185(m)		0	<1	3
Molybdenum	ppm	ASTM D5185(m)		49	49	52
Manganese	ppm	ASTM D5185(m)		<1	2	16
Magnesium	ppm	ASTM D5185(m)		788	782	760
Calcium	ppm	ASTM D5185(m)		1165	1150	1276
Phosphorus	ppm	ASTM D5185(m)		719	733	701
Zinc	ppm	ASTM D5185(m)		821	809	840
Sulfur	ppm	ASTM D5185(m)		1909	1887	1961
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	6	8	42
Sodium	ppm	ASTM D5185(m)		2	3	6
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	1

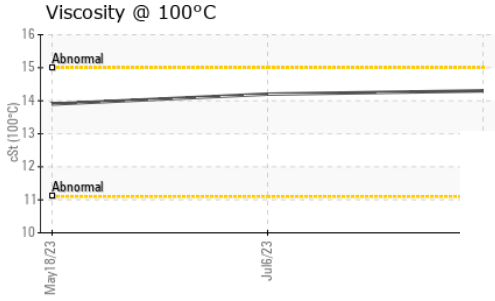
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	10.4	10.2	12.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.8	20.3	23.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.3	18.4	21.3

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

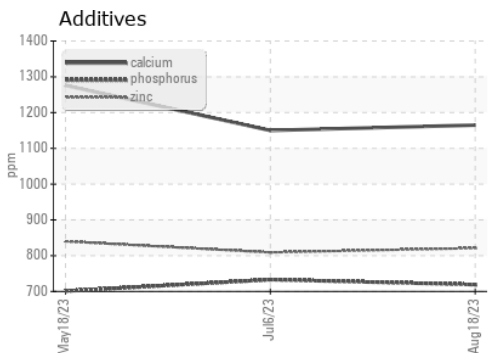
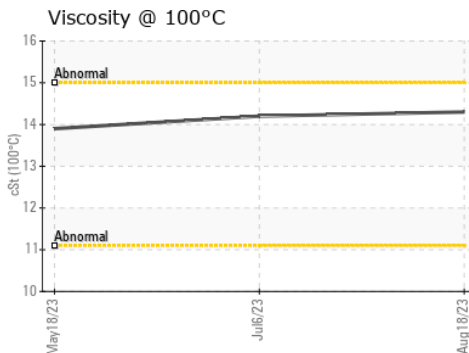
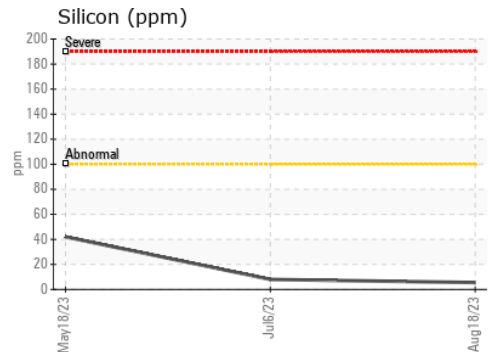
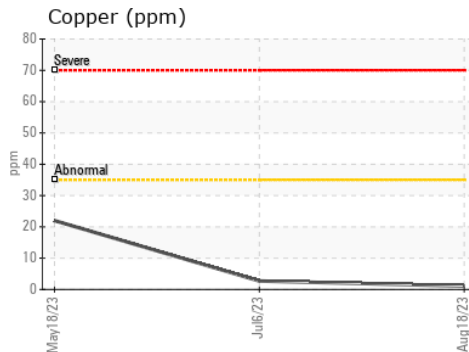
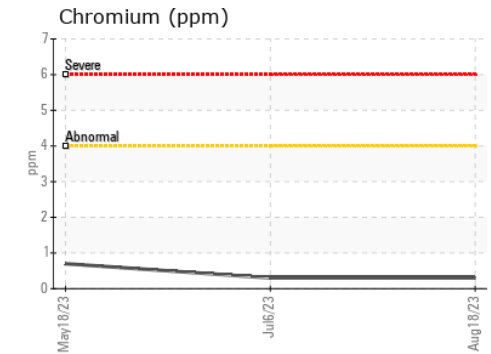
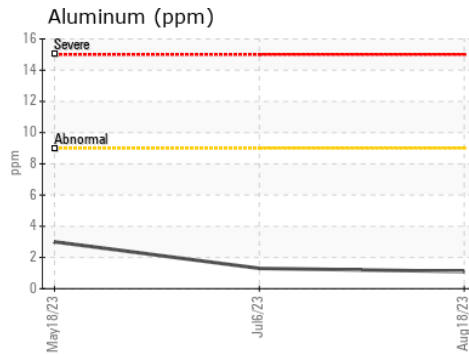
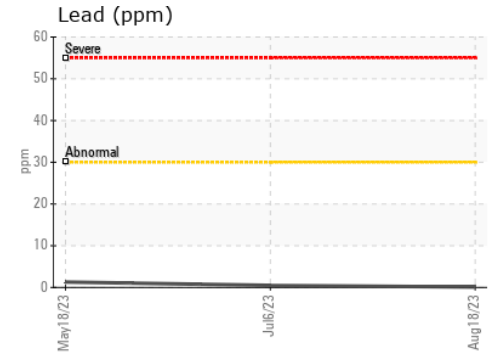
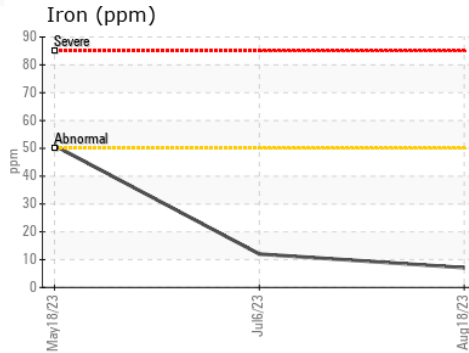


OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)		14.3	14.2	13.9

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0830136 **Received** : 22 Aug 2023
Lab Number : 02577445 **Diagnosed** : 22 Aug 2023
Unique Number : 5630505 **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.