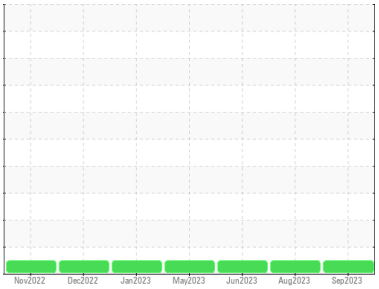
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
2109
Component
Natural Gas Engine
Fluid
DIESEL ENGINE OIL SAE 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		**WC0849849**	WC0830188	WC0811401
Sample Date		Client Info		**20 Sep 2023**	02 Aug 2023	19 Jun 2023
Machine Age	kms	Client Info		**52636**	44251	35101
Oil Age	kms	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**NORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	**6**	8	8
Chromium	ppm	ASTM D5185(m)	>4	**<1**	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	**0**	0	<1
Titanium	ppm	ASTM D5185(m)		**0**	<1	<1
Silver	ppm	ASTM D5185(m)	>3	**<1**	0	0
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	2
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)	250	**11**	11	10
Barium	ppm	ASTM D5185(m)	10	**<1**	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	**52**	52	49
Manganese	ppm	ASTM D5185(m)		**0**	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	**804**	785	767
Calcium	ppm	ASTM D5185(m)	3000	**1212**	1191	1176
Phosphorus	ppm	ASTM D5185(m)	1150	**665**	676	638
Zinc	ppm	ASTM D5185(m)	1350	**872**	862	836
Sulfur	ppm	ASTM D5185(m)	4250	**1947**	1952	1841
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

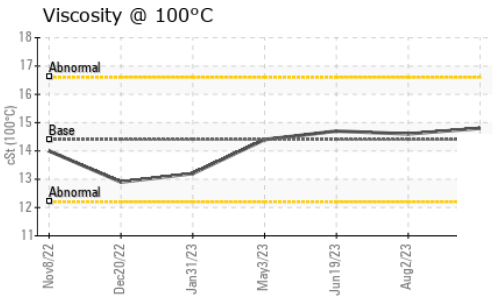
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	**5**	7	10
Sodium	ppm	ASTM D5185(m)	>158	**3**	2	3
Potassium	ppm	ASTM D5185(m)	>20	**0**	<1	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**11.3**	12.2	12.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	**20.8**	22.9	21.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**18.5**	19.6	19.8

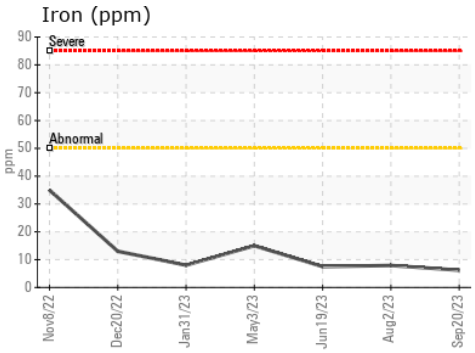
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

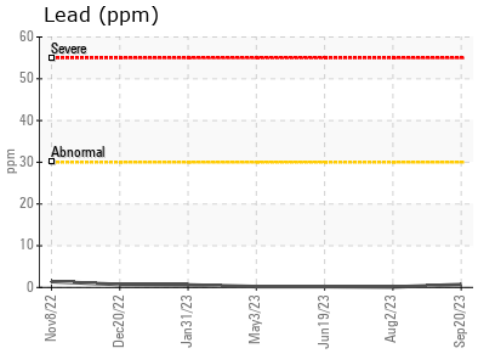
OIL ANALYSIS REPORT

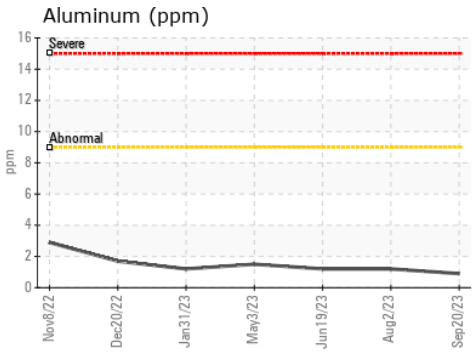


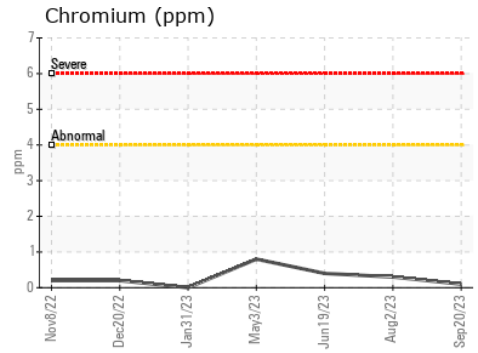
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	**14.8**	14.6	14.7

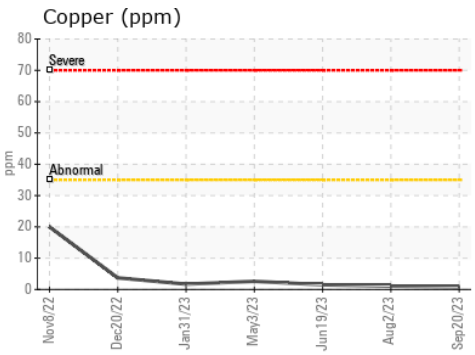
GRAPHS

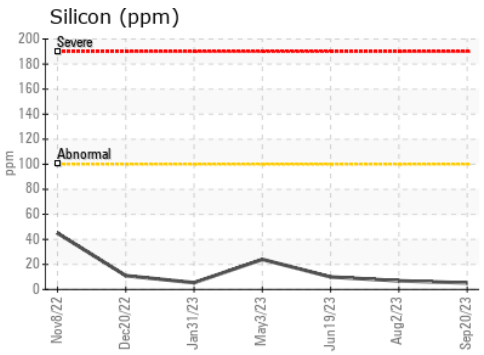


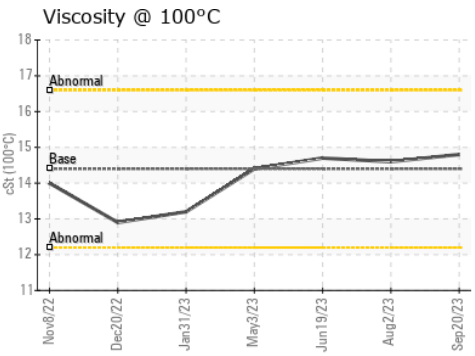


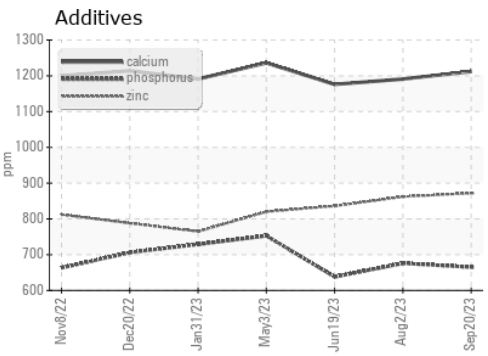












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0849849
Lab Number : 02586085
Unique Number : 5655151
Test Package : MOB 1

Received : 02 Oct 2023
Diagnosed : 02 Oct 2023
Diagnostician : Wes Davis

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.

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