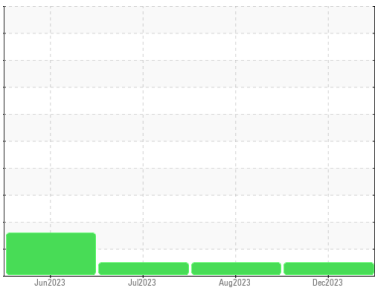
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
2230
Component
Natural Gas Engine
Fluid
SAFETY-KLEEN PERFORMANCE PLUS XHD-7 15W40 (--- GAL)

DIAGNOSIS

Recommendation
Confirm the source of the lubricant being utilized for top-up/fill. 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
Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0878098**	WC0849947	WC0830225
Sample Date		Client Info		**01 Dec 2023**	30 Aug 2023	13 Jul 2023
Machine Age	kms	Client Info		**8389**	5855	3519
Oil Age	kms	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	Changed	N/A
Sample Status				**NORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	**12**	9	7
Chromium	ppm	ASTM D5185(m)	>4	**0**	<1	0
Nickel	ppm	ASTM D5185(m)	>2	**<1**	0	0
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	0
Copper	ppm	ASTM D5185(m)	>35	**2**	1	2
Tin	ppm	ASTM D5185(m)	>4	**<1**	0	0
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)		**37**	35	44
Barium	ppm	ASTM D5185(m)		**10**	0	<1
Molybdenum	ppm	ASTM D5185(m)		**49**	49	46
Manganese	ppm	ASTM D5185(m)		**2**	<1	2
Magnesium	ppm	ASTM D5185(m)		**781**	790	758
Calcium	ppm	ASTM D5185(m)		**1163**	1154	1123
Phosphorus	ppm	ASTM D5185(m)		**694**	772	746
Zinc	ppm	ASTM D5185(m)		**825**	812	802
Sulfur	ppm	ASTM D5185(m)		**1941**	2002	1949
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	**20**	8	8
Sodium	ppm	ASTM D5185(m)		**7**	2	3
Potassium	ppm	ASTM D5185(m)	>20	**0**	<1	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**7.7**	8.2	6.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	**20.2**	21.4	20.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**17.2**	17.3	16.6

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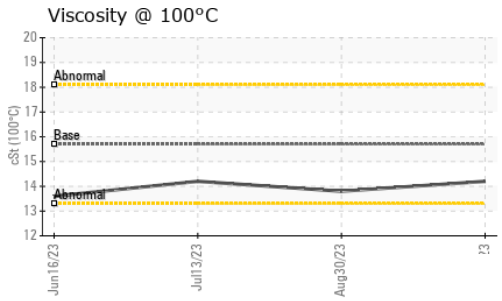
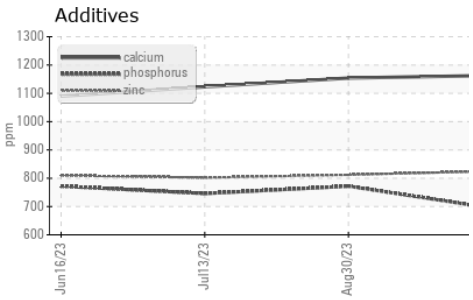
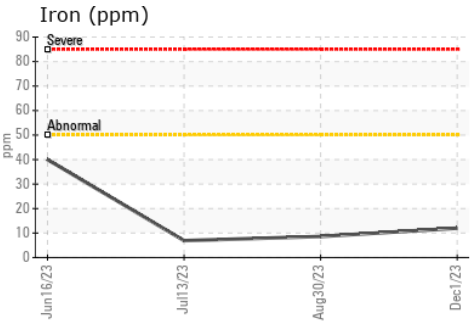


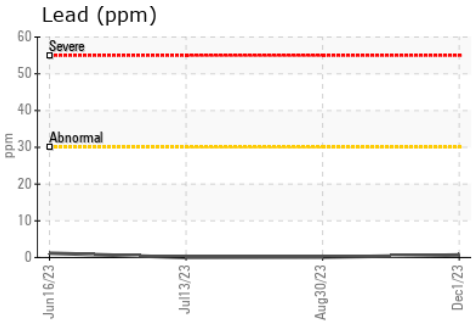


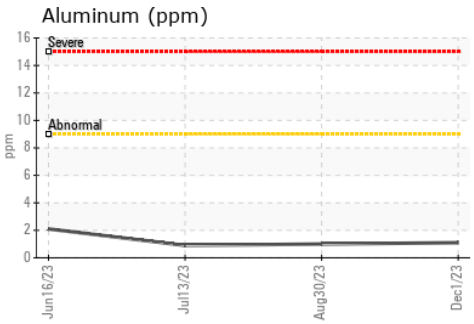
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

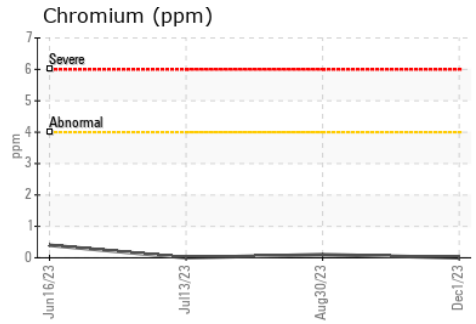
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.7	**14.2**	13.8	14.2

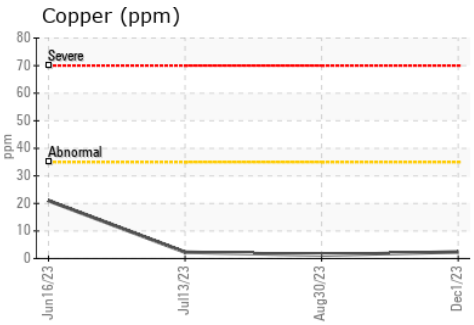
GRAPHS

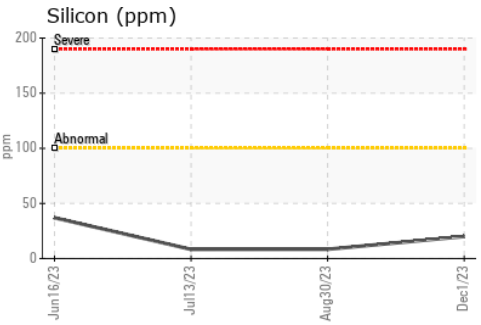


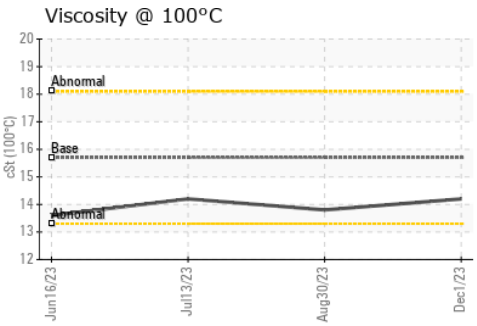


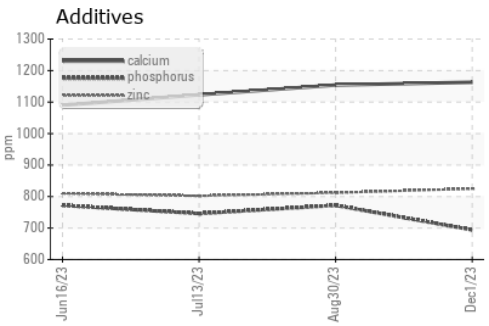












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0878098
Lab Number : 02601221
Unique Number : 5694306
Test Package : MOB 1

Received : 06 Dec 2023
Diagnosed : 07 Dec 2023
Diagnostician : Bill Quesnel

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.

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