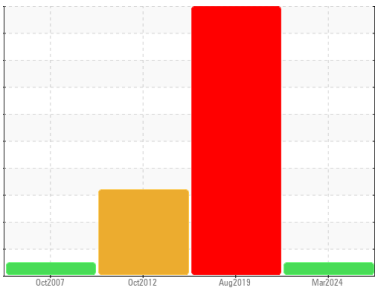
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
[6100223760]
Machine Id
06D0308335
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.

Wear
Metal levels are typical for a new component breaking in.

Contamination
Test for glycol is negative. There is no indication of any contamination in the oil.

Fluid Condition
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WA0019465**	WC876927	WC381000
Sample Date		Client Info		**07 Mar 2024**	09 Aug 2019	05 Oct 2012
Machine Age	hrs	Client Info		**2**	0	204
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**NORMAL**	SEVERE	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	**<1.0**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>101	**10**	65	58
Chromium	ppm	ASTM D5185(m)	>16	**<1**	1	5
Nickel	ppm	ASTM D5185(m)	>6	**<1**	<1	0
Titanium	ppm	ASTM D5185(m)	>2	**0**	46	0
Silver	ppm	ASTM D5185(m)	>2	**0**	<1	<1
Aluminum	ppm	ASTM D5185(m)	>21	**1**	2	2
Lead	ppm	ASTM D5185(m)	>41	**8**	17	16
Copper	ppm	ASTM D5185(m)	>21	**25**	143	167
Tin	ppm	ASTM D5185(m)	>13	**20**	36	17
Antimony	ppm	ASTM D5185(m)		**0**	<1	2
Vanadium	ppm	ASTM D5185(m)		**0**	<1	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	<1	1

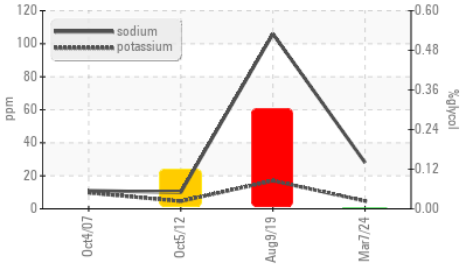
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	**<1**	10	65
Barium	ppm	ASTM D5185(m)	10	**0**	<1	2
Molybdenum	ppm	ASTM D5185(m)	100	**102**	65	138
Manganese	ppm	ASTM D5185(m)		**<1**	2	2
Magnesium	ppm	ASTM D5185(m)	450	**14**	336	72
Calcium	ppm	ASTM D5185(m)	3000	**2396**	1298	3319
Phosphorus	ppm	ASTM D5185(m)	1150	**986**	683	1084
Zinc	ppm	ASTM D5185(m)	1350	**1028**	1174	1632
Sulfur	ppm	ASTM D5185(m)	4250	**4908**	2480	5850
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>16	**12**	21	23
Sodium	ppm	ASTM D5185(m)	>216	**28**	106	10
Potassium	ppm	ASTM D5185(m)	>20	**5**	17	5
Glycol	%	ASTM D7922*		**0.0**	0.301	0.12

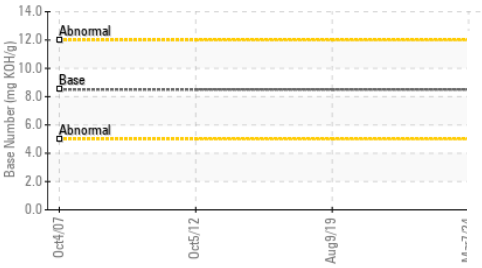
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>0.8	**0**	0	0.3
Nitration	Abs/cm	ASTM D7624*	>20	**3.8**	6.4	8.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	**13.8**	19.1	35.5

OIL ANALYSIS REPORT

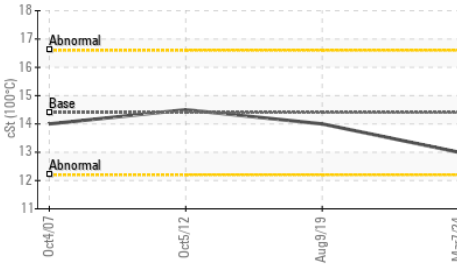
Glycol Contamination



Base Number



Viscosity @ 100°C



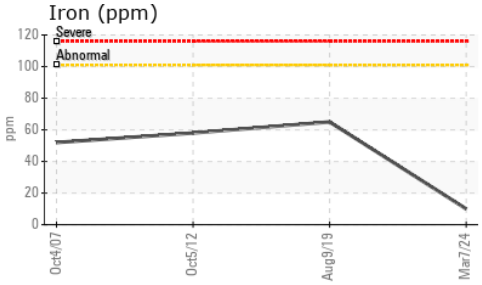
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**6.4**	13.1	16.5
Base Number (BN)	mg KOH/g	ASTM D2896*	8.5	**8.69**	---	---

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	▲ .2%	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

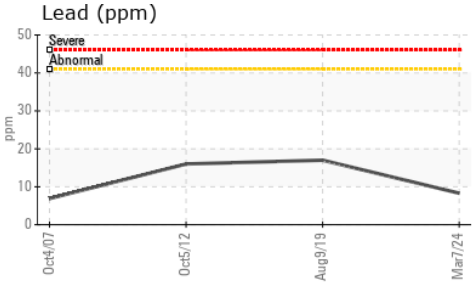
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	**13.0**	14.0	14.5

GRAPHS

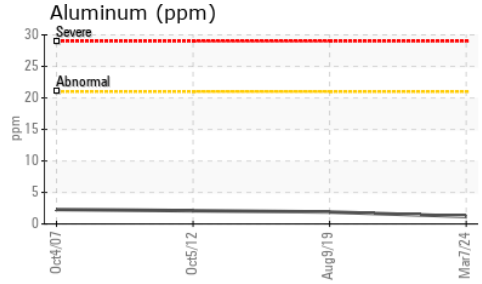
Iron (ppm)



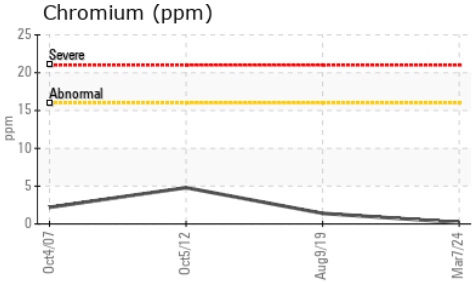
Lead (ppm)



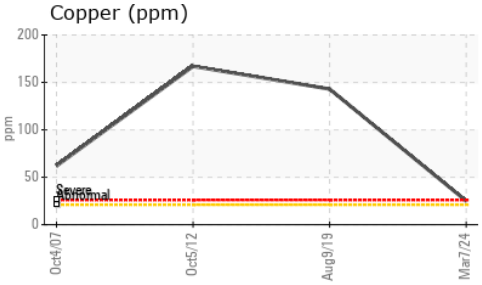
Aluminum (ppm)



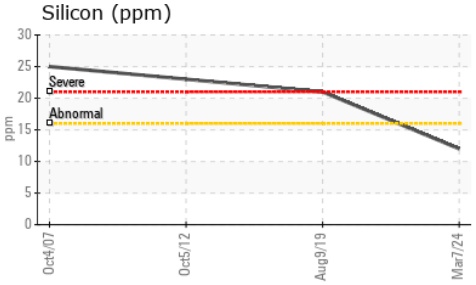
Chromium (ppm)



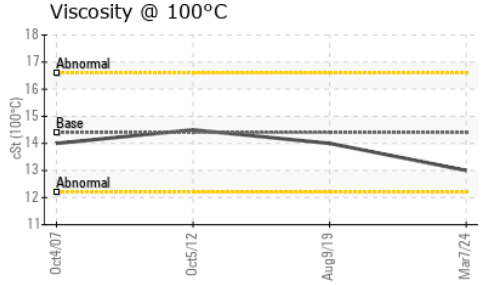
Copper (ppm)



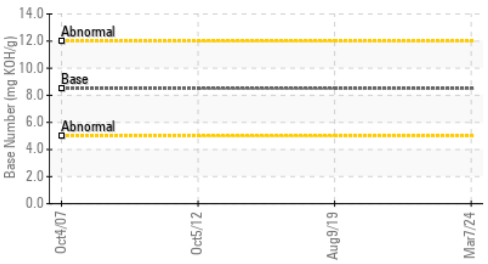
Silicon (ppm)



Viscosity @ 100°C



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WA0019465
Lab Number : 02621043
Unique Number : 5746162
Test Package : MOB 2

Received : 11 Mar 2024
Tested : 11 Mar 2024
Diagnosed : 12 Mar 2024 - Kevin Marson

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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