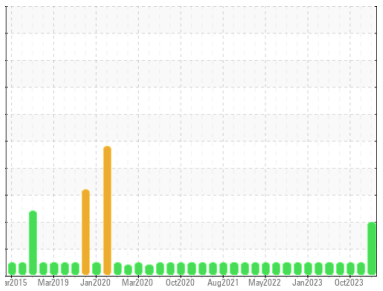
OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
Toronto Shunt
Machine Id
AUTOCAR 5006
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON SHP 15W40 (24 LTR)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is a moderate concentration of water present in the oil. Test for glycol is negative.

Fluid Condition

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0899677**	WC0899636	WC0848055
Sample Date		Client Info		**17 Mar 2024**	21 Jan 2024	01 Oct 2023
Machine Age	hrs	Client Info		**29704**	29114	28345
Oil Age	hrs	Client Info		**1149**	866	553
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	**10**	14	9
Chromium	ppm	ASTM D5185(m)	>4	**<1**	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	**0**	<1	0
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)	>3	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>9	**<1**	2	<1
Lead	ppm	ASTM D5185(m)	>30	**0**	<1	<1
Copper	ppm	ASTM D5185(m)	>35	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>4	**0**	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)	0	**2**	3	3
Barium	ppm	ASTM D5185(m)	0	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	60	**70**	70	68
Manganese	ppm	ASTM D5185(m)	0	**0**	0	0
Magnesium	ppm	ASTM D5185(m)	1010	**1177**	1121	1132
Calcium	ppm	ASTM D5185(m)	1070	**1254**	1261	1269
Phosphorus	ppm	ASTM D5185(m)	1150	**1153**	1186	1149
Zinc	ppm	ASTM D5185(m)	1270	**1433**	1392	1400
Sulfur	ppm	ASTM D5185(m)	2060	**2665**	2839	2662
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	**2**	3	3
Sodium	ppm	ASTM D5185(m)		**2**	2	2
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	0
Fuel	%	ASTM D7593*	>4.0	**0.2**	---	---
Water	%	ASTM D6304*	>0.1	▲ **0.539**	---	---
ppm Water	ppm	ASTM D6304*	>1000	▲ **5392**	---	---
Glycol	%	ASTM D7922*		**0.0**	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**9.1**	7.4	7.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	**18.1**	19.6	19.1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**15.8**	14.6	14.4

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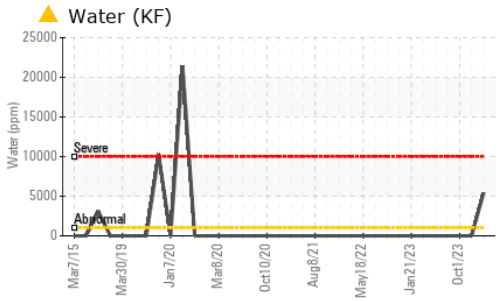
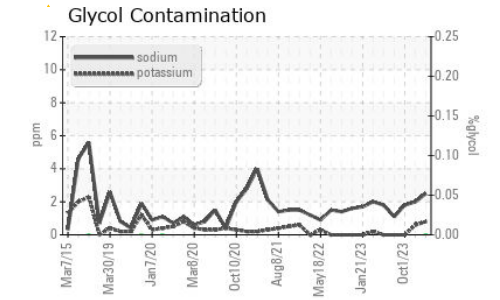
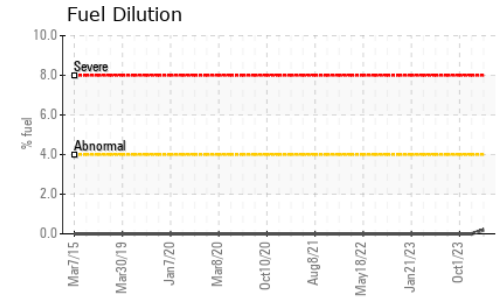
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	▲ .2%	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

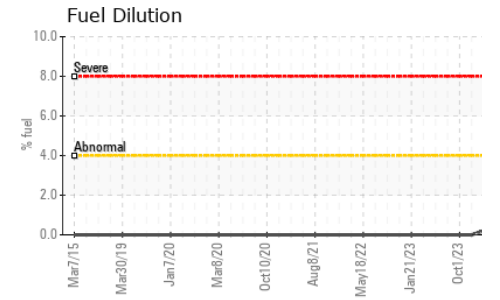
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ 11.5	12.9	13.3

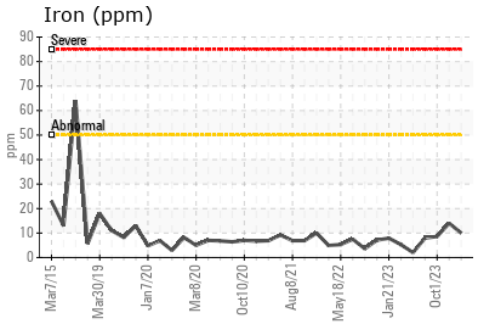
GRAPHS

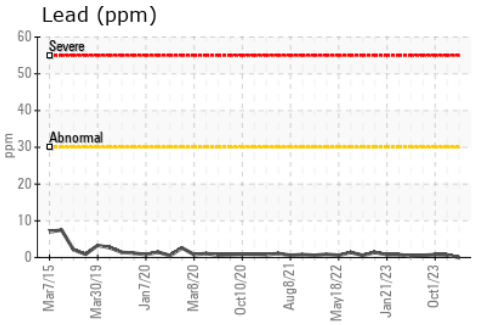


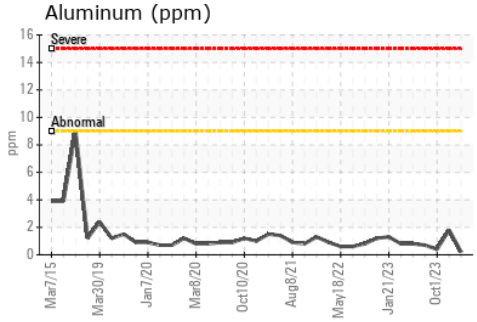


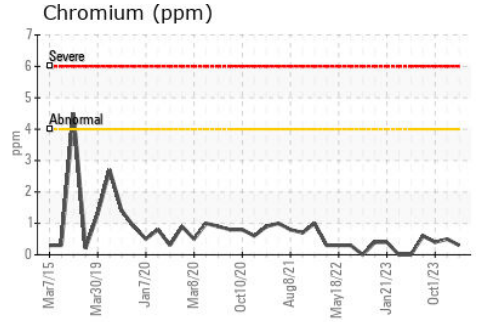


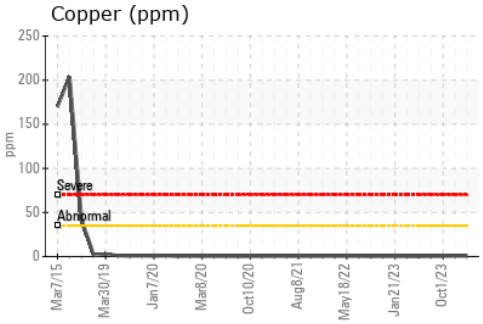


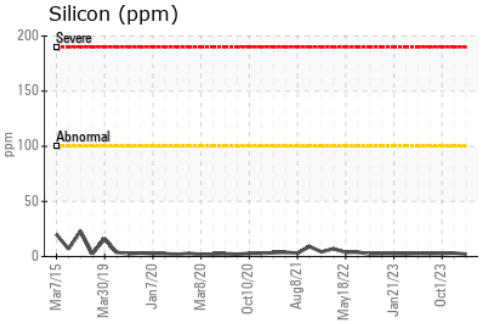


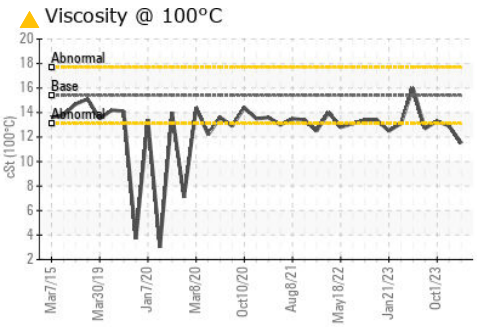


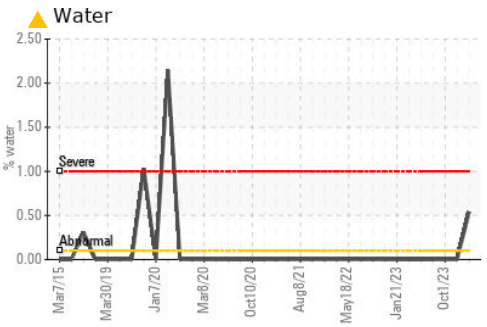












CALA Testing Accreditation No. 1005078
ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0899677
Lab Number : 02623277
Unique Number : 5748396
Test Package : MOB 1 (Additional Tests: FUELDILUTION, Glycol, KF, PercentFuel)

Received : 20 Mar 2024
Tested : 22 Mar 2024
Diagnosed : 22 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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