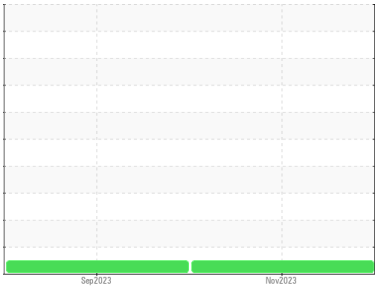
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
KENWORTH 2049
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

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

Contamination
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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		**PC0075841**	PC0075843	---
Sample Date		Client Info		**24 Nov 2023**	08 Sep 2023	---
Machine Age	kms	Client Info		**25500**	624	---
Oil Age	kms	Client Info		**25500**	624	---
Oil Changed		Client Info		**Changed**	Changed	---
Sample Status				**NORMAL**	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>5	**<1.0**	<1.0	---
Water		WC Method	>0.2	**NEG**	NEG	---
Glycol		WC Method		**NEG**	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	**24**	46	---
Chromium	ppm	ASTM D5185(m)	>20	**<1**	<1	---
Nickel	ppm	ASTM D5185(m)	>4	**<1**	<1	---
Titanium	ppm	ASTM D5185(m)		**0**	0	---
Silver	ppm	ASTM D5185(m)	>3	**<1**	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	**21**	9	---
Lead	ppm	ASTM D5185(m)	>40	**<1**	2	---
Copper	ppm	ASTM D5185(m)	>330	**17**	69	---
Tin	ppm	ASTM D5185(m)	>15	**<1**	<1	---
Antimony	ppm	ASTM D5185(m)		**0**	0	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Beryllium	ppm	ASTM D5185(m)		**0**	0	---
Cadmium	ppm	ASTM D5185(m)		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	**4**	32	---
Barium	ppm	ASTM D5185(m)	0	**<1**	1	---
Molybdenum	ppm	ASTM D5185(m)	50	**56**	21	---
Manganese	ppm	ASTM D5185(m)	0	**<1**	1	---
Magnesium	ppm	ASTM D5185(m)	950	**940**	774	---
Calcium	ppm	ASTM D5185(m)	1050	**1132**	1352	---
Phosphorus	ppm	ASTM D5185(m)	995	**967**	807	---
Zinc	ppm	ASTM D5185(m)	1180	**1191**	922	---
Sulfur	ppm	ASTM D5185(m)	2600	**2384**	2434	---
Lithium	ppm	ASTM D5185(m)		**<1**	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**6**	12	---
Sodium	ppm	ASTM D5185(m)		**2**	4	---
Potassium	ppm	ASTM D5185(m)	>20	**51**	34	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	**0.1**	0	---
Nitration	Abs/cm	ASTM D7624*	>20	**9.4**	9.3	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	**20.7**	21.2	---

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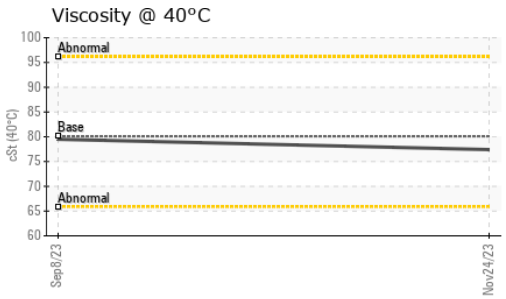
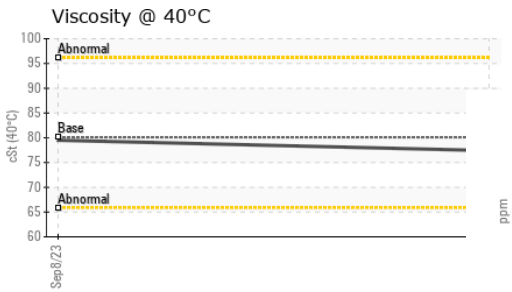


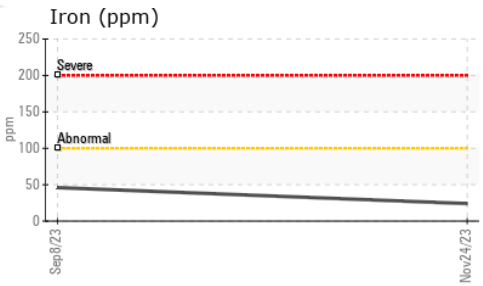


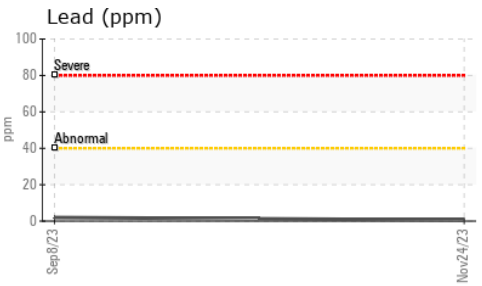
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**16.9**	16.1	---

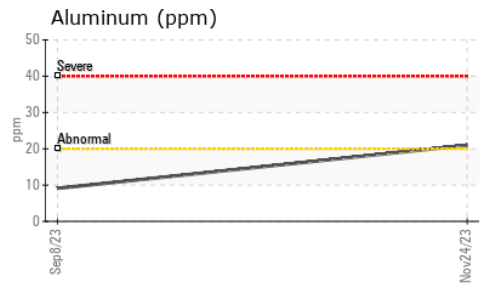
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	---
Free Water	scalar	Visual*		**NEG**	NEG	---

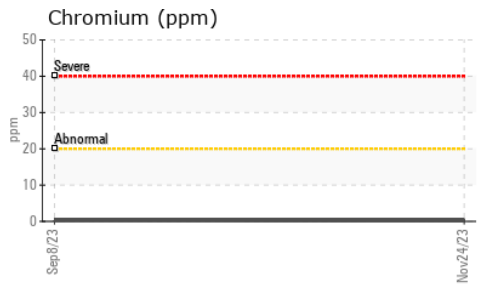
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	**77.4**	79.5	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	**11.5**	11.8	---
Viscosity Index (VI)	Scale	ASTM D2270*	144	**140**	142	---

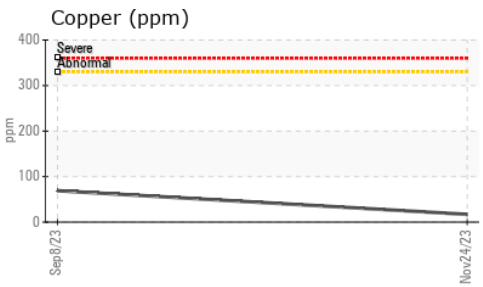
GRAPHS

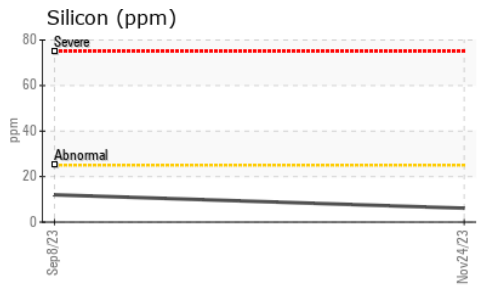


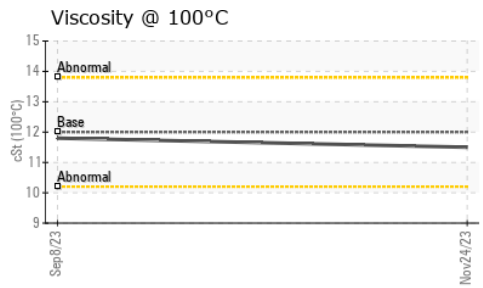


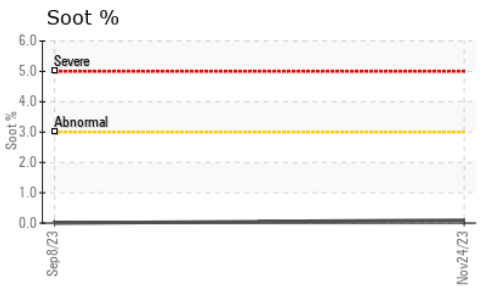












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0075841 **Received** : 28 Nov 2023
Lab Number : 02599254 **Diagnosed** : 28 Nov 2023
Unique Number : 5684334 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI)

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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