

OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area
Charlestown
Machine Id
707
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)



DIAGNOSIS

Recommendation
No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other component wear rates are normal.

Contamination
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	PCA0104516	---	---
Sample Date	Client Info	26 Feb 2024	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >200	12	---	---
Chromium ppm	ASTM D5185m >20	2	---	---
Nickel ppm	ASTM D5185m >2	0	---	---
Titanium ppm	ASTM D5185m >2	<1	---	---
Silver ppm	ASTM D5185m >2	0	---	---
Aluminum ppm	ASTM D5185m >30	12	---	---
Lead ppm	ASTM D5185m >30	0	---	---
Copper ppm	ASTM D5185m >30	▲ 108	---	---
Tin ppm	ASTM D5185m >15	<1	---	---
Vanadium ppm	ASTM D5185m	0	---	---
Cadmium ppm	ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm	ASTM D5185m 2	4	---	---
Barium ppm	ASTM D5185m 0	0	---	---
Molybdenum ppm	ASTM D5185m 50	58	---	---
Manganese ppm	ASTM D5185m 0	<1	---	---
Magnesium ppm	ASTM D5185m 950	907	---	---
Calcium ppm	ASTM D5185m 1050	1027	---	---
Phosphorus ppm	ASTM D5185m 995	918	---	---
Zinc ppm	ASTM D5185m 1180	1152	---	---
Sulfur ppm	ASTM D5185m 2600	2194	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >30	3	---	---
Sodium ppm	ASTM D5185m	2	---	---
Potassium ppm	ASTM D5185m >20	25	---	---

INFRA-RED

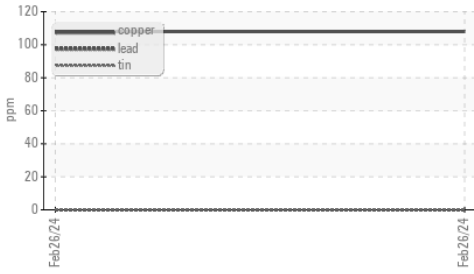
method	limit/base	current	history1	history2
Soot %	*ASTM D7844 >3	0.5	---	---
Nitration	*ASTM D7624 >20	8.6	---	---
Sulfation	*ASTM D7415 >30	19.7	---	---

FLUID DEGRADATION

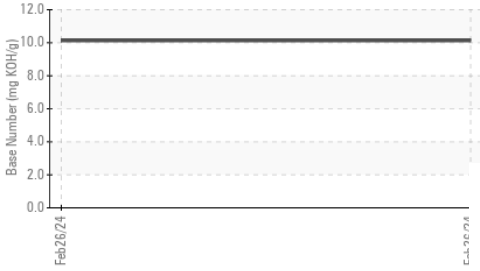
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	15.9	---	---
Base Number (BN)	mg KOH/g ASTM D2896	10.13	---	---

OIL ANALYSIS REPORT

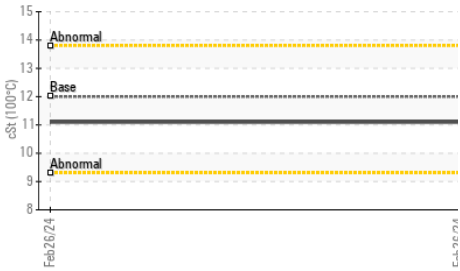
▲ Non-ferrous Metals



Base Number



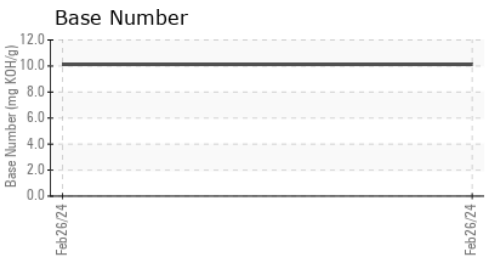
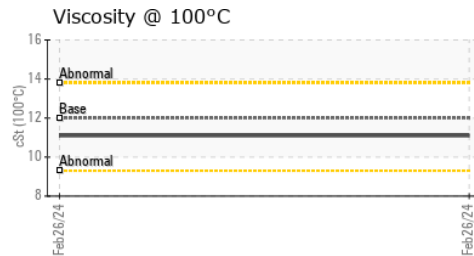
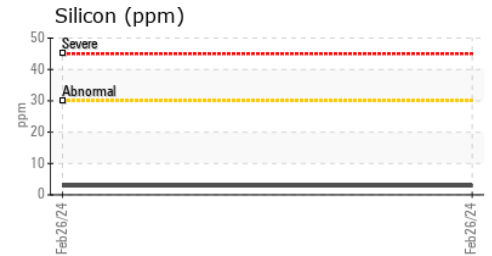
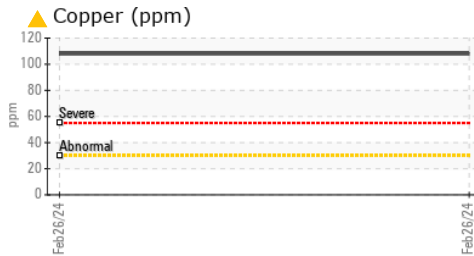
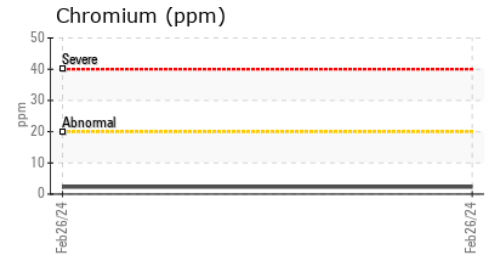
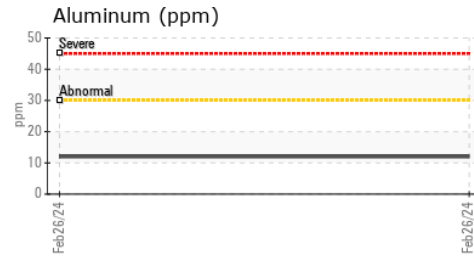
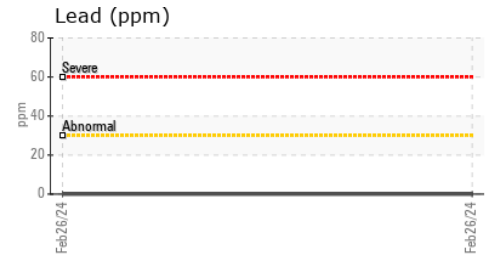
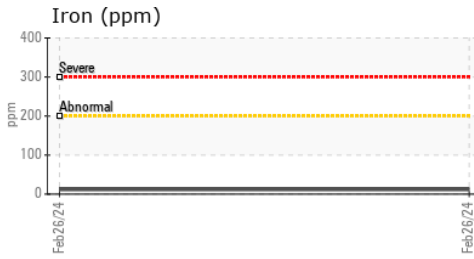
Viscosity @ 100°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.1	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0104516
Lab Number : 06107647
Unique Number : 10911144
Test Package : MOB 2

Received : 04 Mar 2024
Tested : 05 Mar 2024
Diagnosed : 06 Mar 2024 - Sean Felton

PORTSIDE TRUCK AND AUTO - DIVERSIFIED AUTO
 100 TERMINAL ST
 CHARLESTOWN, MA
 US 02129

Contact: BRYAN WINTER
 BWINTERS@DIVERSIFIEDAUTO.COM

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T: 1(857)998-2229

F: