

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
MACK 1711
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a components first oil change.

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		PCA0096093	---	---
Sample Date	Client Info		25 Sep 2023	---	---
Machine Age	mls Client Info		1450	---	---
Oil Age	mls Client Info		1450	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			NORMAL	---	---

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	>120	13	---	---
Chromium	ppm ASTM D5185m	>20	<1	---	---
Nickel	ppm ASTM D5185m	>5	1	---	---
Titanium	ppm ASTM D5185m	>2	0	---	---
Silver	ppm ASTM D5185m	>2	0	---	---
Aluminum	ppm ASTM D5185m	>20	3	---	---
Lead	ppm ASTM D5185m	>40	<1	---	---
Copper	ppm ASTM D5185m	>330	2	---	---
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	0	3	---	---
Barium	ppm ASTM D5185m	0	0	---	---
Molybdenum	ppm ASTM D5185m	60	53	---	---
Manganese	ppm ASTM D5185m	0	<1	---	---
Magnesium	ppm ASTM D5185m	1010	876	---	---
Calcium	ppm ASTM D5185m	1070	991	---	---
Phosphorus	ppm ASTM D5185m	1150	1048	---	---
Zinc	ppm ASTM D5185m	1270	1187	---	---
Sulfur	ppm ASTM D5185m	2060	2975	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>25	5	---	---
Sodium	ppm ASTM D5185m		4	---	---
Potassium	ppm ASTM D5185m	>20	3	---	---

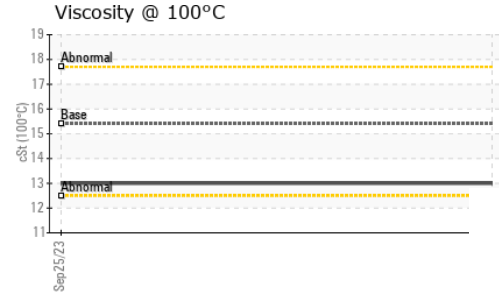
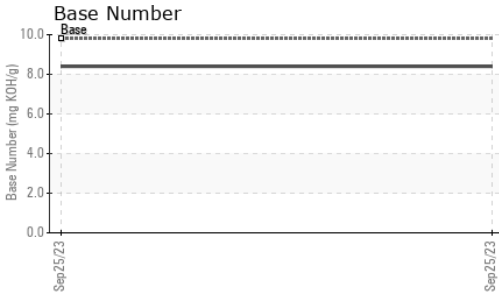
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>4	0.4	---	---
Nitration	Abs/cm *ASTM D7624	>20	7.8	---	---
Sulfation	Abs/.1mm *ASTM D7415	>30	19.8	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	15.7	---	---
Base Number (BN)	mg KOH/g ASTM D2896	9.8	8.4	---	---

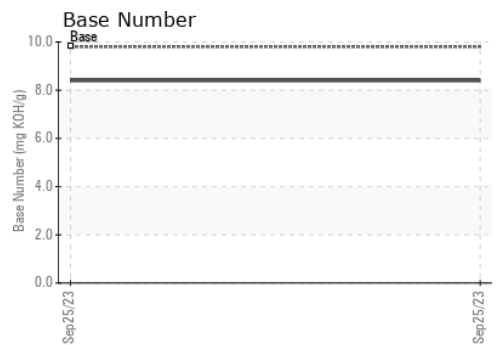
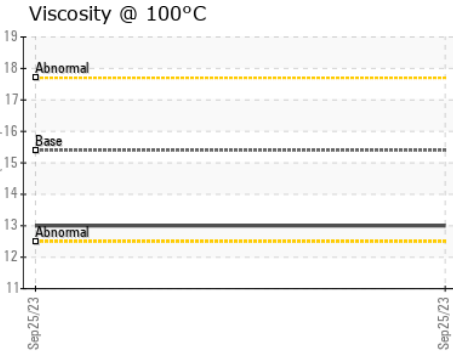
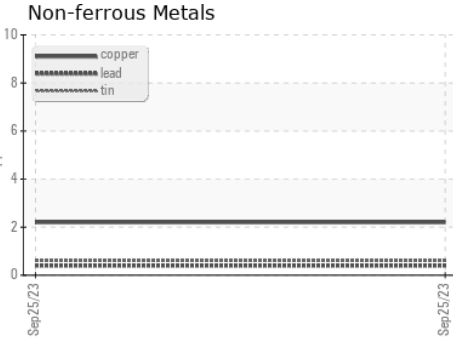
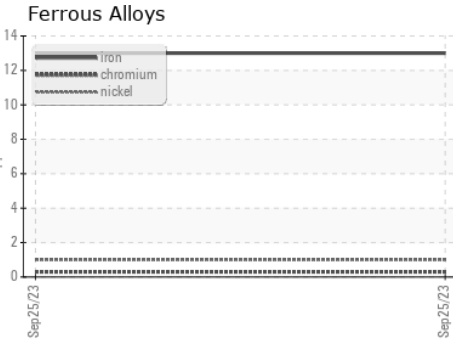
OIL ANALYSIS REPORT



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	15.4	13.0	---	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0096093 **Received** : 27 Nov 2023
Lab Number : **06017739** **Diagnosed** : 28 Nov 2023
Unique Number : 10756883 **Diagnostician** : Wes Davis
Test Package : FLEET

Z FORCE TRANSPORTATION INC
 700 E JOE ORR RD
 CHICAGO HEIGHTS, IL
 US 60411
 Contact: MIKE PROCANIN
 mprocanin@zforcetransportation.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)