



PROBLEM SUMMARY

Sample Rating Trend

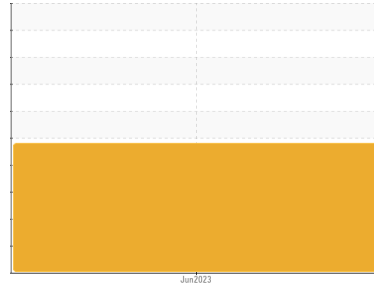
FUEL



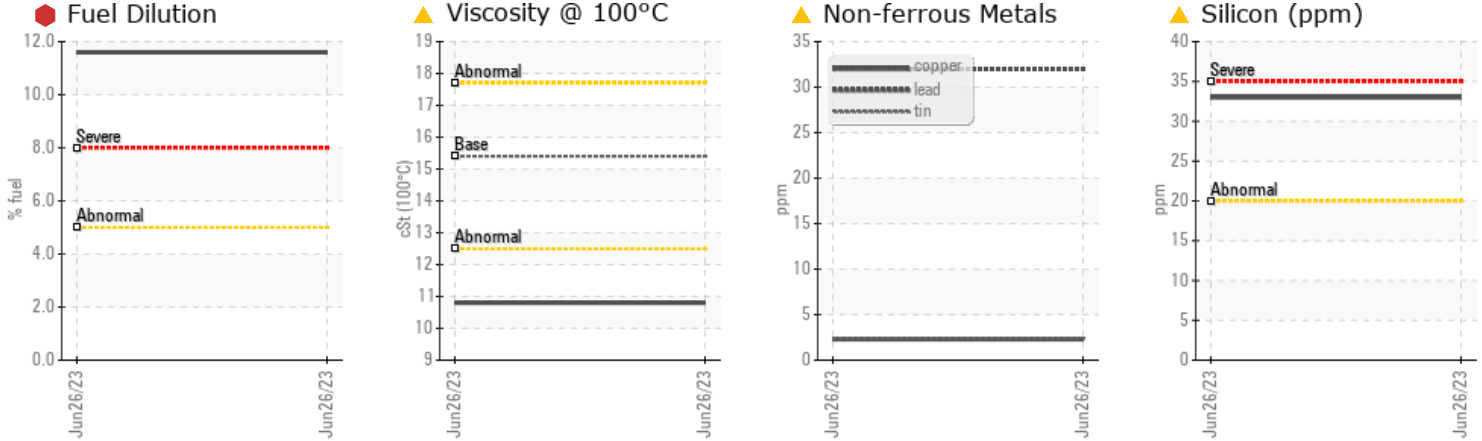
Machine Id
FREIGHTLINER 2

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (13 LTR)



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Lead	ppm	ASTM D5185m	>30	▲ 32	---	---
Silicon	ppm	ASTM D5185m	>20	▲ 33	---	---
Fuel	%	ASTM D3524	>5	● 11.6	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 10.8	---	---

Customer Id: ATRPIN
Sample No.: PCA0100625
Lab Number: 05889878
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

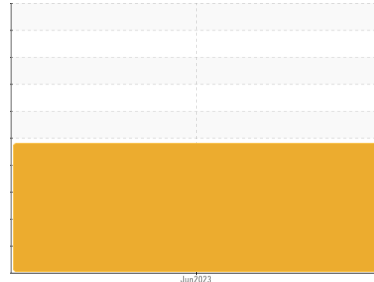
RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Fuel/injector System	---	---	?	We advise that you check the fuel injection system.

HISTORICAL DIAGNOSIS



Machine Id
FREIGHTLINER 2
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (13 LTR)



DIAGNOSIS

Recommendation
 We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear
 The lead level is abnormal.

Contamination
 Elemental level of silicon (Si) above normal . There is a high amount of fuel present in the oil.

Fluid Condition
 Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number	Client Info		PCA0100625	---	---
Sample Date	Client Info		26 Jun 2023	---	---
Machine Age	mls	Client Info	587612	---	---
Oil Age	mls	Client Info	28347	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history 1	history 2
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >80	58	---	---
Chromium	ppm	ASTM D5185m >5	3	---	---
Nickel	ppm	ASTM D5185m >2	<1	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m >3	0	---	---
Aluminum	ppm	ASTM D5185m >30	<1	---	---
Lead	ppm	ASTM D5185m >30	32	---	---
Copper	ppm	ASTM D5185m >150	2	---	---
Tin	ppm	ASTM D5185m >5	2	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 0	<1	---	---
Barium	ppm	ASTM D5185m 0	0	---	---
Molybdenum	ppm	ASTM D5185m 60	56	---	---
Manganese	ppm	ASTM D5185m 0	<1	---	---
Magnesium	ppm	ASTM D5185m 1010	796	---	---
Calcium	ppm	ASTM D5185m 1070	1005	---	---
Phosphorus	ppm	ASTM D5185m 1150	893	---	---
Zinc	ppm	ASTM D5185m 1270	1074	---	---
Sulfur	ppm	ASTM D5185m 2060	2667	---	---

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >20	33	---	---
Sodium	ppm	ASTM D5185m	2	---	---
Potassium	ppm	ASTM D5185m >20	3	---	---
Fuel	%	ASTM D3524 >5	11.6	---	---

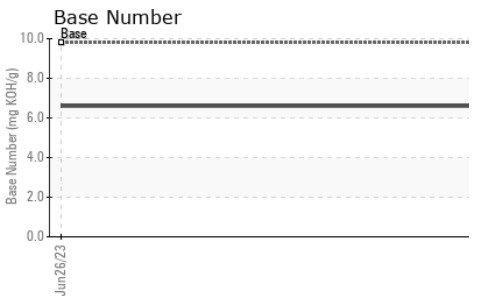
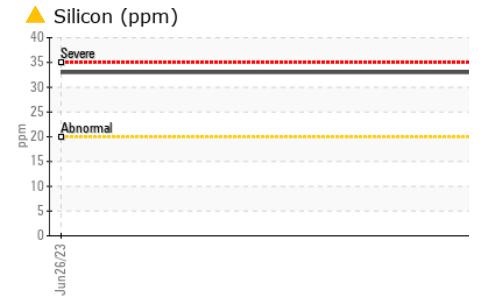
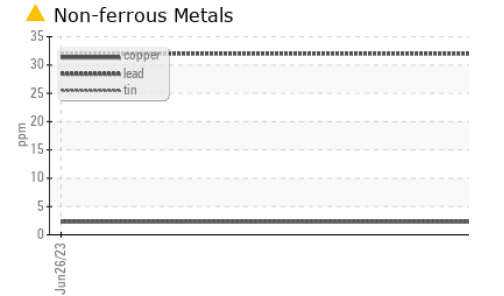
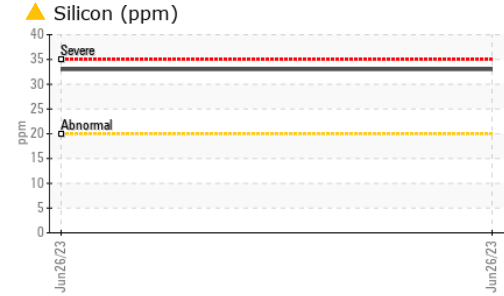
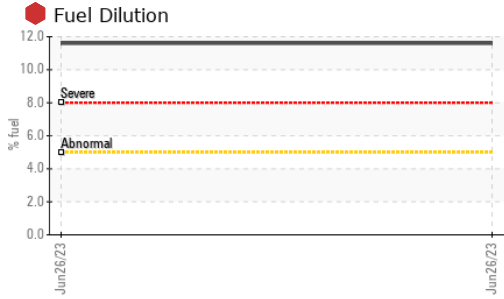
INFRA-RED

	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844 >3	2.1	---	---
Nitration	Abs/cm	*ASTM D7624 >20	10.1	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	25.3	---	---

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	22.0	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	6.6	---	---

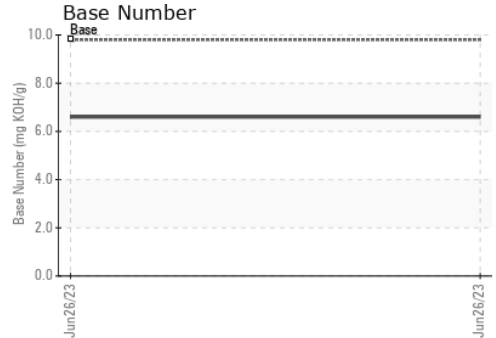
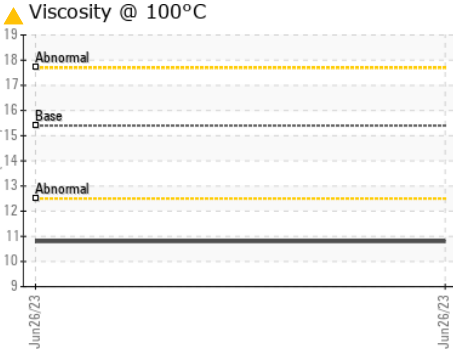
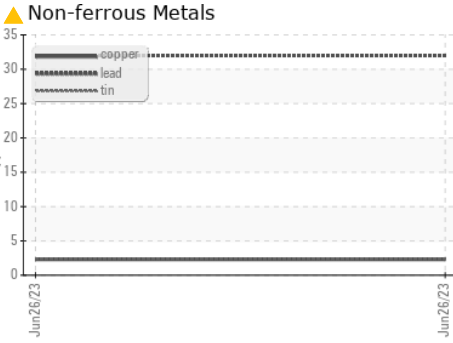
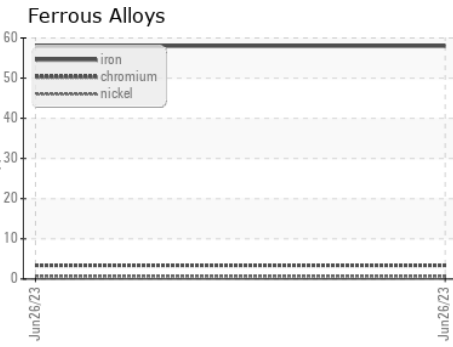
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2	
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	history 1	history 2	
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 10.8	---	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0100625 **Received** : 05 Jul 2023
Lab Number : **05889878** **Diagnosed** : 06 Jul 2023
Unique Number : 10545688 **Diagnostician** : Don Baldrige
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

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)

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