

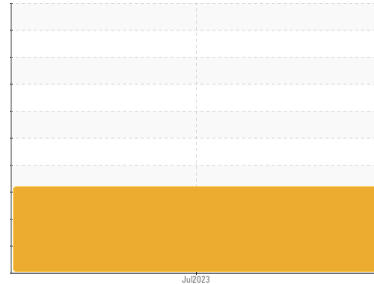
PROBLEM SUMMARY

Sample Rating Trend

DIRT

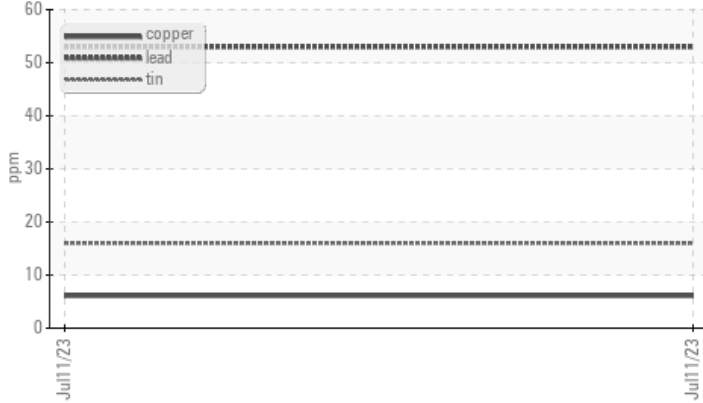


Machine Id
FREIGHTLINER 23
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (13 LTR)

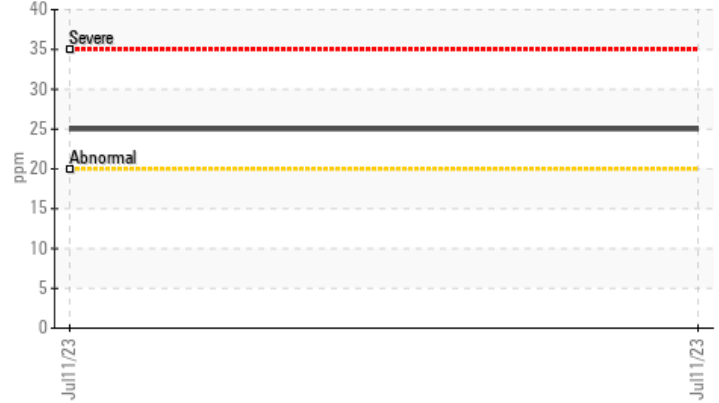


COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



▲ Silicon (ppm)



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status	Value	Unit	ASTM D5185m	Limit	Result	Severe	Abnormal
Lead	53	ppm	ASTM D5185m	>30	▲ 53	---	---
Tin	16	ppm	ASTM D5185m	>5	▲ 16	---	---
Silicon	25	ppm	ASTM D5185m	>20	▲ 25	---	---

Customer Id: ATRPIN
 Sample No.: PCA0100674
 Lab Number: 05902074
 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.

HISTORICAL DIAGNOSIS



Machine Id
FREIGHTLINER 23
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (13 LTR)



DIAGNOSIS

- Recommendation**
 Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.
- Wear**
 The tin level is abnormal. The lead level is abnormal.
- Contamination**
 Elemental level of silicon (Si) above normal.
- Fluid Condition**
 The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0100674	---	---
Sample Date	Client Info	11 Jul 2023	---	---
Machine Age	hrs Client Info	379302	---	---
Oil Age	hrs Client Info	27119	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >80	79	---	---
Chromium	ppm ASTM D5185m >5	4	---	---
Nickel	ppm ASTM D5185m >2	0	---	---
Titanium	ppm ASTM D5185m	<1	---	---
Silver	ppm ASTM D5185m >3	0	---	---
Aluminum	ppm ASTM D5185m >30	2	---	---
Lead	ppm ASTM D5185m >30	▲ 53	---	---
Copper	ppm ASTM D5185m >150	6	---	---
Tin	ppm ASTM D5185m >5	▲ 16	---	---
Vanadium	ppm ASTM D5185m	<1	---	---
Cadmium	ppm ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	2	---	---
Barium	ppm ASTM D5185m 0	0	---	---
Molybdenum	ppm ASTM D5185m 60	64	---	---
Manganese	ppm ASTM D5185m 0	1	---	---
Magnesium	ppm ASTM D5185m 1010	942	---	---
Calcium	ppm ASTM D5185m 1070	1247	---	---
Phosphorus	ppm ASTM D5185m 1150	1004	---	---
Zinc	ppm ASTM D5185m 1270	1266	---	---
Sulfur	ppm ASTM D5185m 2060	3463	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	▲ 25	---	---
Sodium	ppm ASTM D5185m	48	---	---
Potassium	ppm ASTM D5185m >20	10	---	---

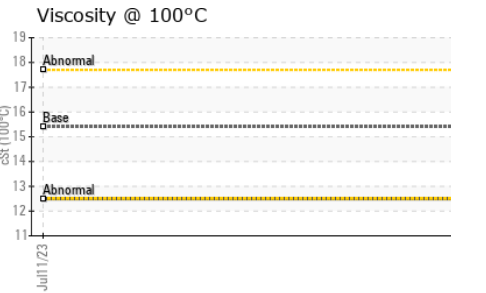
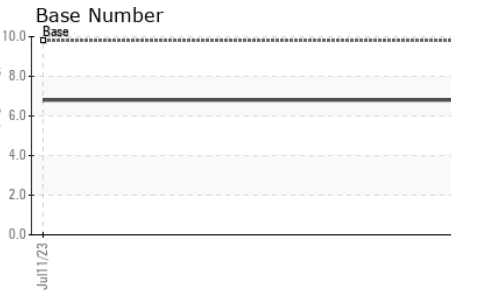
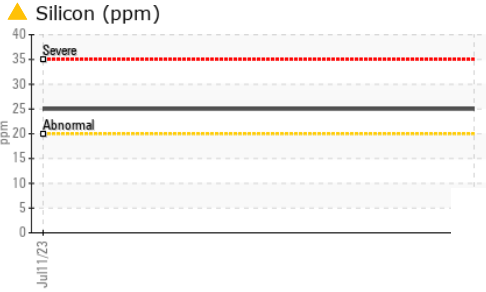
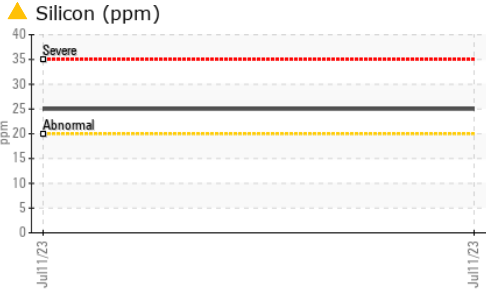
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.5	---	---
Nitration	Abs/cm *ASTM D7624 >20	11.0	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	22.8	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	21.1	---	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	6.8	---	---

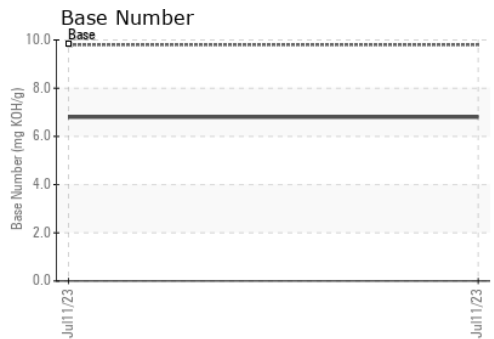
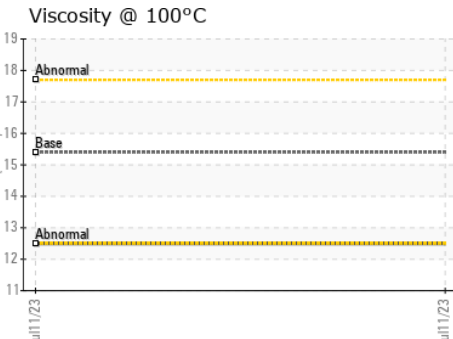
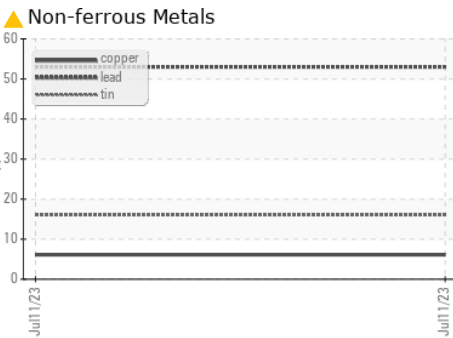
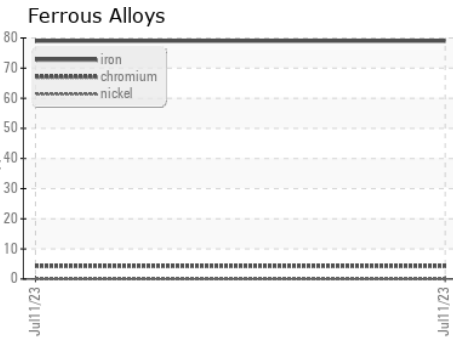
OIL ANALYSIS REPORT



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	12.5	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0100674 **Received** : 19 Jul 2023
Lab Number : 05902074 **Diagnosed** : 20 Jul 2023
Unique Number : 10563430 **Diagnostician** : Don Baldrige
Test Package : FLEET

A Truck Repair
 9349 China Grove Church Road
 Pineville, NC
 US 28134
 Contact: Vlad Melnichuk
 shop@migway.com
 T: (980)255-3200
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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)