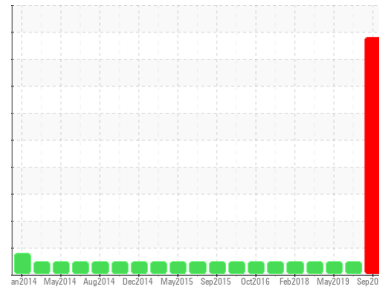


PROBLEM SUMMARY

Sample Rating Trend



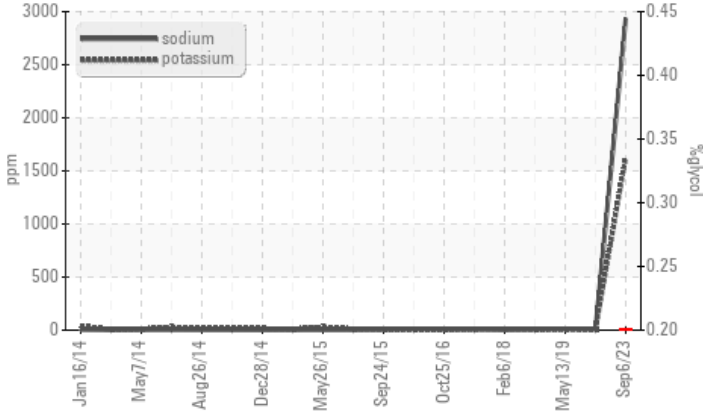
GLYCOL



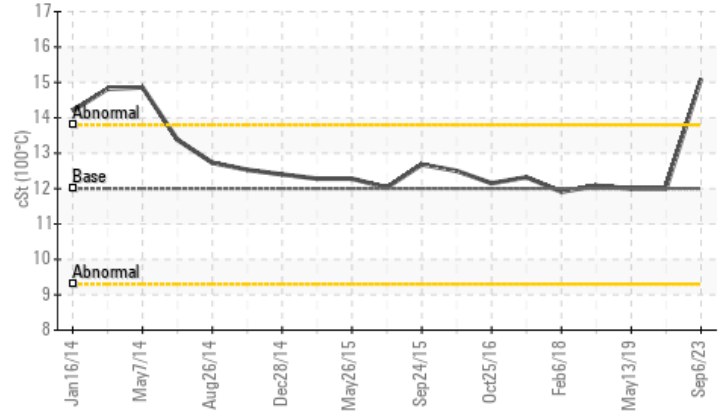
Machine Id
FREIGHTLINER 8347
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (44 QTS)

COMPONENT CONDITION SUMMARY

Glycol Contamination



Viscosity @ 100°C



RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. 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	NORMAL	NORMAL
Sodium	ppm	ASTM D5185m		▲ 2935	8	10
Potassium	ppm	ASTM D5185m	>20	▲ 1630	<1	6
Glycol	%	*ASTM D2982		● 0.20	NEG	NEG
Visc @ 100°C	cSt	ASTM D445	12.00	▲ 15.1	12.0	12.0

Customer Id: MIDFAR
 Sample No.: PCA0088671
 Lab Number: 05994050
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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 Glycol Access	---	---	?	We advise that you check for the source of the coolant leak.

HISTORICAL DIAGNOSIS

27 Nov 2020 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

[view report](#)



13 May 2019 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

[view report](#)



02 Oct 2018 Diag: Jonathan Hester

NORMAL



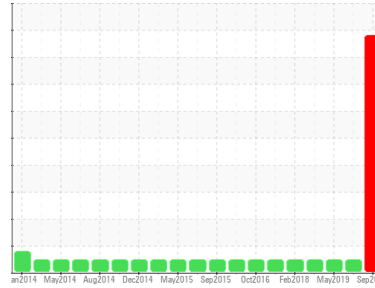
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

[view report](#)





Machine Id
FREIGHTLINER 8347
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (44 QTS)



DIAGNOSIS

Recommendation
 We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear
 All component wear rates are normal.

Contamination
 Sodium and/or potassium levels are high. There is a high concentration of glycol present in the oil.

Fluid Condition
 The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0088671	PCA0035463	PCA0001650
Sample Date	Client Info	06 Sep 2023	27 Nov 2020	13 May 2019
Machine Age	mls	653714	568595	506802
Oil Age	mls	653714	29600	29590
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		SEVERE	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<1.0	<1.0	<1.0

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >200	76	41	38
Chromium	ppm ASTM D5185m >6	4	2	2
Nickel	ppm ASTM D5185m >3	0	0	1
Titanium	ppm ASTM D5185m >2	<1	<1	<1
Silver	ppm ASTM D5185m >2	0	<1	0
Aluminum	ppm ASTM D5185m >50	15	10	11
Lead	ppm ASTM D5185m >10	0	0	0
Copper	ppm ASTM D5185m >50	13	8	5
Tin	ppm ASTM D5185m >6	<1	<1	1
Antimony	ppm ASTM D5185m	---	0	0
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 2	2	5	6
Barium	ppm ASTM D5185m 0	0	0	0
Molybdenum	ppm ASTM D5185m 50	151	68	72
Manganese	ppm ASTM D5185m 0	2	<1	<1
Magnesium	ppm ASTM D5185m 950	510	1076	1075
Calcium	ppm ASTM D5185m 1050	1576	1213	1356
Phosphorus	ppm ASTM D5185m 995	808	1097	1078
Zinc	ppm ASTM D5185m 1180	914	1322	1299
Sulfur	ppm ASTM D5185m 2600	2184	2408	2418

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >50	13	7	7
Sodium	ppm ASTM D5185m	▲ 2935	8	10
Potassium	ppm ASTM D5185m >20	▲ 1630	<1	6
Glycol	% *ASTM D2982	◆ 0.20	NEG	NEG

INFRA-RED

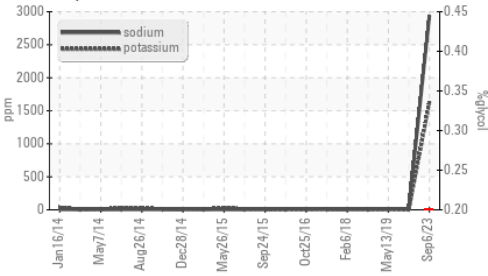
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	1	1.4	1.2
Nitration	Abs/cm *ASTM D7624 >20	23.6	11.5	11.2
Sulfation	Abs/.1mm *ASTM D7415 >30	27.1	25.8	23.9

FLUID DEGRADATION

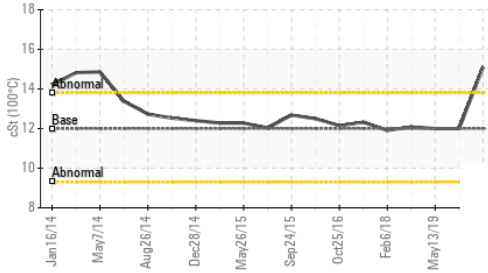
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	27.5	22.2	21
Base Number (BN)	mg KOH/g ASTM D2896	24.3	6.6	6.8

OIL ANALYSIS REPORT

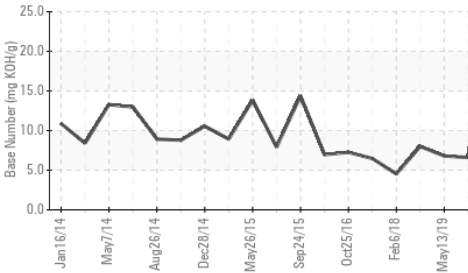
Glycol Contamination



Viscosity @ 100°C



Base Number

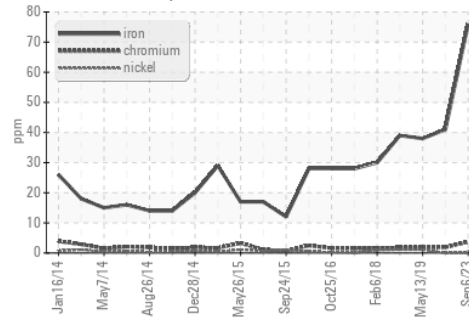


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

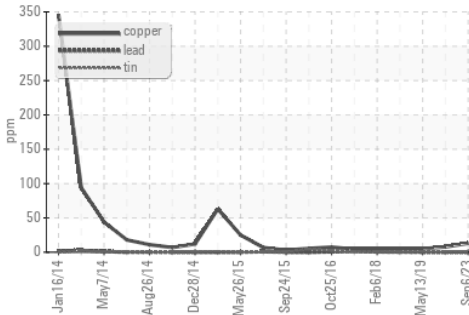
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00 ▲ 15.1	12.0	12.0

GRAPHS

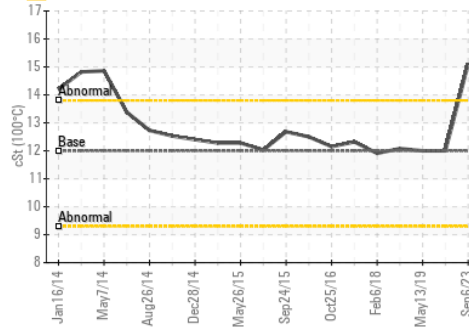
Ferrous Alloys



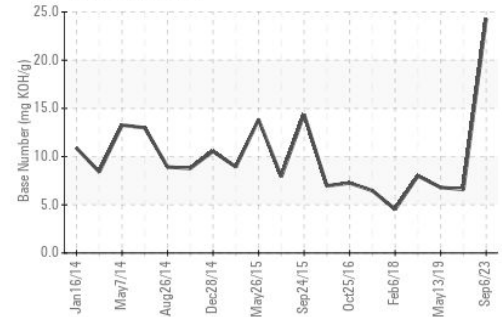
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0088671 **Received** : 31 Oct 2023
Lab Number : 05994050 **Diagnosed** : 03 Nov 2023
Unique Number : 10722410 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

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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