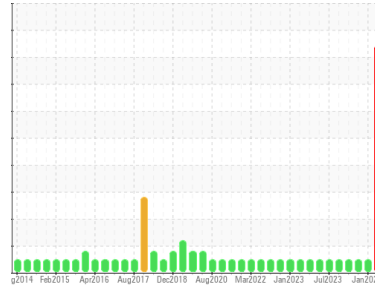




PROBLEM SUMMARY

Sample Rating Trend



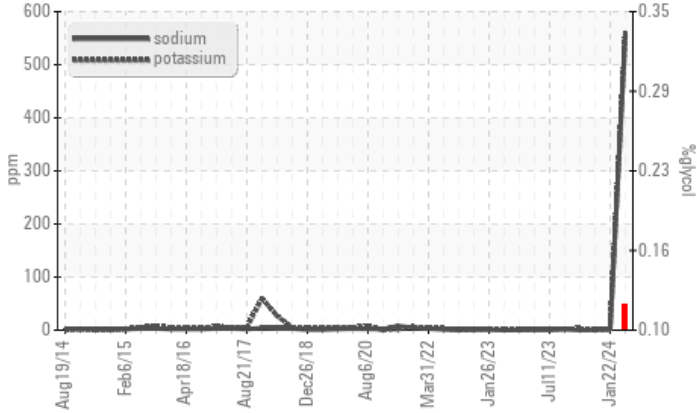
GLYCOL



Machine Id
11102
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (30 GAL)

COMPONENT CONDITION SUMMARY

▲ Glycol Contamination



RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	NORMAL	NORMAL
Sodium	ppm	ASTM D5185m	▲ 562	<1	1
Potassium	ppm	ASTM D5185m >20	▲ 553	2	0
Glycol	%	*ASTM D2982	▲ 0.12	NEG	NEG

Customer Id: GFL084
 Sample No.: GFL0098862
 Lab Number: 06120657
 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	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Change Filter	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
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

22 Jan 2024 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



04 Dec 2023 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



20 Oct 2023 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.

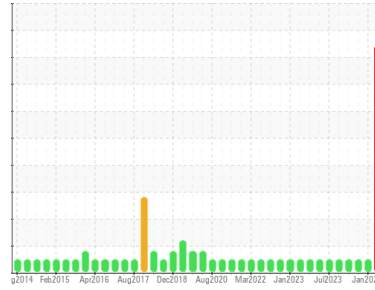
view report





OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
11102

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (30 GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend that you drain the oil and perform a filter service on this component if not already done. 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 BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	GFL0098862	GFL0098963	GFL0098949	
Sample Date	Client Info	06 Mar 2024	22 Jan 2024	04 Dec 2023	
Machine Age	hrs	Client Info	12345	12199	12051
Oil Age	hrs	Client Info	62002	62002	62002
Oil Changed	Client Info	N/A	N/A	N/A	
Sample Status		SEVERE	NORMAL	NORMAL	

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >130	39	18	6
Chromium	ppm ASTM D5185m >10	<1	0	0
Nickel	ppm ASTM D5185m >4	0	0	0
Titanium	ppm ASTM D5185m >2	0	0	0
Silver	ppm ASTM D5185m >2	0	0	0
Aluminum	ppm ASTM D5185m >20	6	2	<1
Lead	ppm ASTM D5185m >20	0	0	0
Copper	ppm ASTM D5185m >125	<1	2	<1
Tin	ppm ASTM D5185m >4	0	<1	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 0	1	3	<1
Barium	ppm ASTM D5185m 0	0	0	0
Molybdenum	ppm ASTM D5185m 60	96	56	51
Manganese	ppm ASTM D5185m 0	0	0	0
Magnesium	ppm ASTM D5185m 1010	938	984	883
Calcium	ppm ASTM D5185m 1070	1278	1098	1044
Phosphorus	ppm ASTM D5185m 1150	1156	1066	917
Zinc	ppm ASTM D5185m 1270	1292	1281	1152
Sulfur	ppm ASTM D5185m 2060	3406	3213	2749

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	10	2	2
Sodium	ppm ASTM D5185m	▲ 562	<1	1
Potassium	ppm ASTM D5185m >20	▲ 553	2	0
Glycol	% *ASTM D2982	▲ 0.12	NEG	NEG

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	0.5	0.5	0.2
Nitration	Abs/cm *ASTM D7624 >20	10.3	7.6	5.7
Sulfation	Abs/.1mm *ASTM D7415 >30	20.3	18.7	17.6

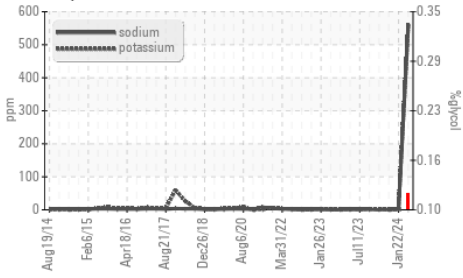
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	15.9	14.6	13.7
Base Number (BN)	mg KOH/g ASTM D2896 9.8	9.5	8.4	8.7

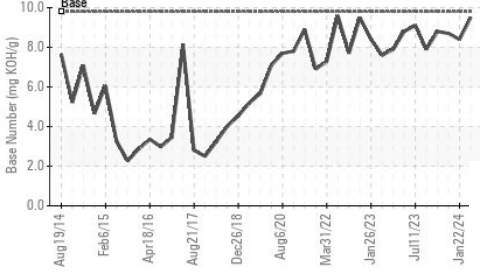


OIL ANALYSIS REPORT

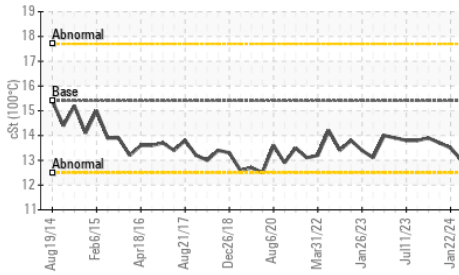
▲ Glycol Contamination



Base Number



Viscosity @ 100°C



VISUAL

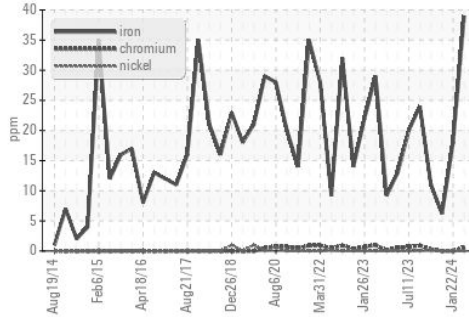
method	limit/base	current	history1	history2		
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE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

FLUID PROPERTIES

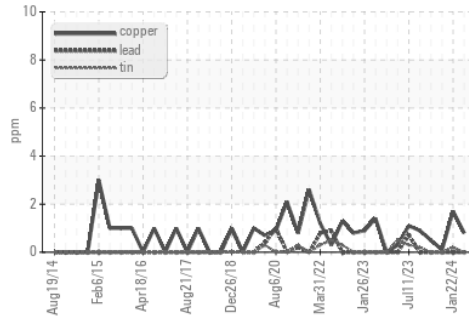
method	limit/base	current	history1	history2		
Visc @ 100°C	cSt	ASTM D445	15.4	13.0	13.5	13.7

GRAPHS

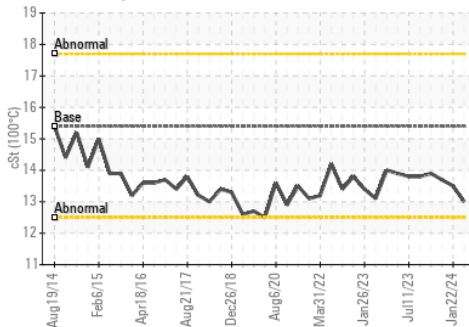
Ferrous Alloys



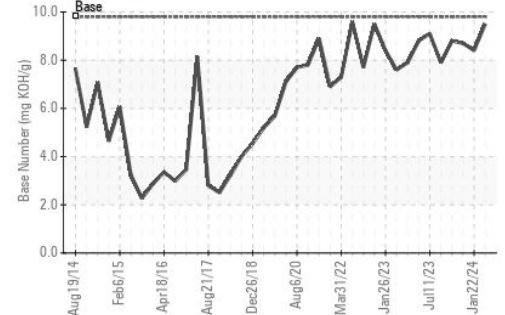
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0098862

Lab Number : 06120657

Unique Number : 10929490

Test Package : FLEET (Additional Tests: Glycol)

Received : 18 Mar 2024

Tested : 20 Mar 2024

Diagnosed : 20 Mar 2024 - Jonathan Hester

GFL Environmental - 084 - Clarksville

699 Jack Miller Boulevard

Clarksville, TN

US 37042

Contact: ROBERT THIBAUT

robert.thibault@gflenv.com

T: (931)552-7276

F: (931)572-9674

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)