



PROBLEM SUMMARY

Sample Rating Trend

GLYCOL

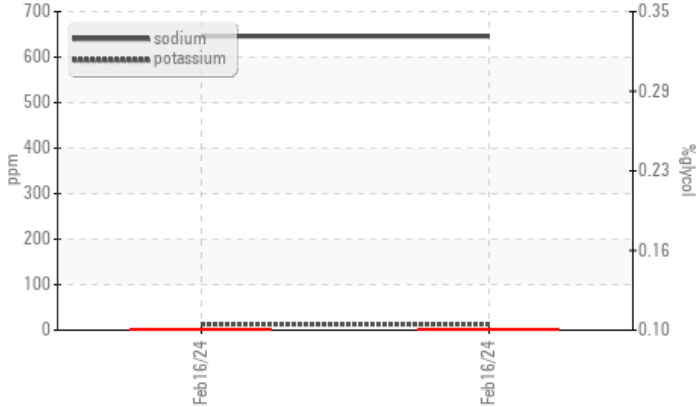


Machine Id
424067
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)



COMPONENT CONDITION SUMMARY

Glycol Contamination



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	---	---
Potassium	ppm	ASTM D5185m	>20	▲ 13	---	---
Glycol	%	*ASTM D2982		● 0.10	---	---

Customer Id: GFL963
Sample No.: GFL0108364
Lab Number: 06095245
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 Glycol Access	---	---	?	We advise that you check for the source of the coolant leak.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL



Machine Id
424067
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)



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. Test for glycol is positive. 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		GFL0108364	---	---
Sample Date	Client Info		16 Feb 2024	---	---
Machine Age	hrs	Client Info	20108	---	---
Oil Age	hrs	Client Info	20108	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	58	---	---
Chromium	ppm	ASTM D5185m >20	4	---	---
Nickel	ppm	ASTM D5185m >2	0	---	---
Titanium	ppm	ASTM D5185m >2	0	---	---
Silver	ppm	ASTM D5185m >2	0	---	---
Aluminum	ppm	ASTM D5185m >25	6	---	---
Lead	ppm	ASTM D5185m >40	26	---	---
Copper	ppm	ASTM D5185m >330	5	---	---
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	23	---	---
Barium	ppm	ASTM D5185m 0	0	---	---
Molybdenum	ppm	ASTM D5185m 60	79	---	---
Manganese	ppm	ASTM D5185m 0	<1	---	---
Magnesium	ppm	ASTM D5185m 1010	1041	---	---
Calcium	ppm	ASTM D5185m 1070	1187	---	---
Phosphorus	ppm	ASTM D5185m 1150	1017	---	---
Zinc	ppm	ASTM D5185m 1270	1320	---	---
Sulfur	ppm	ASTM D5185m 2060	2783	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	20	---	---
Sodium	ppm	ASTM D5185m	▲ 646	---	---
Potassium	ppm	ASTM D5185m >20	▲ 13	---	---
Glycol	%	*ASTM D2982	◆ 0.10	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.2	---	---
Nitration	Abs/cm	*ASTM D7624 >20	15.3	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	31.6	---	---

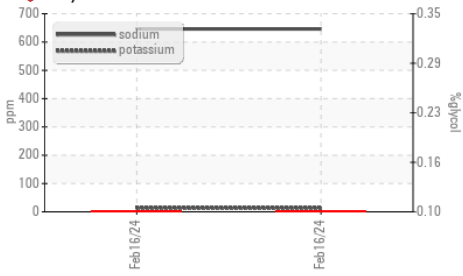
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	34.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	4.8	---	---

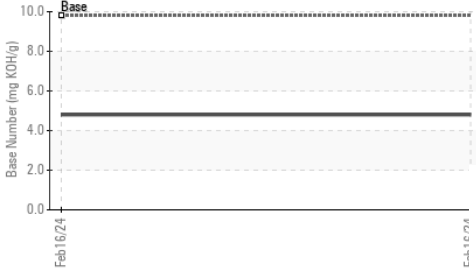


OIL ANALYSIS REPORT

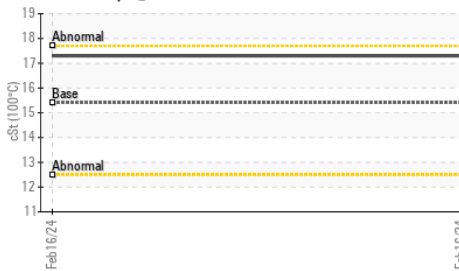
Glycol Contamination



Base Number



Viscosity @ 100°C

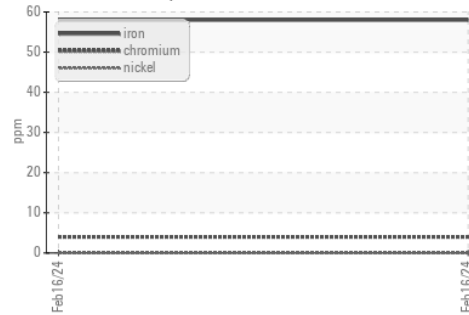


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

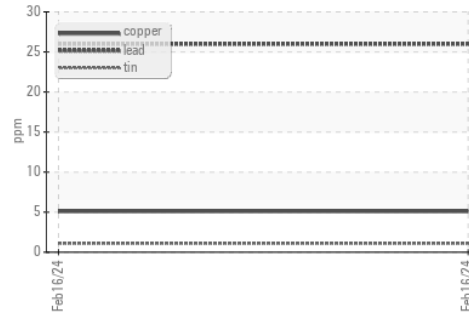
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	17.3	---

GRAPHS

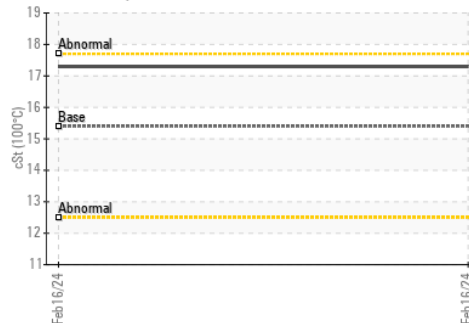
Ferrous Alloys



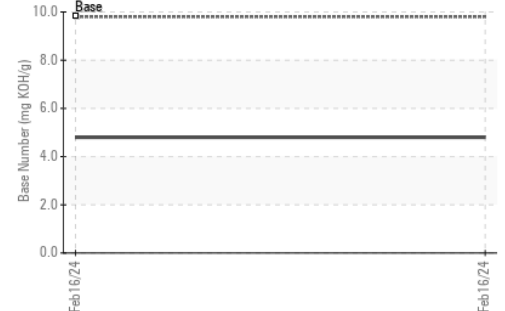
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : GFL0108364

Lab Number : 06095245

Unique Number : 10888098

Test Package : FLEET (Additional Tests: Glycol)

Received : 21 Feb 2024

Tested : 23 Feb 2024

Diagnosed : 23 Feb 2024 - Don Baldrige

GFL Environmental - 963 - Peoria HC Disposal

1113 N. Swords Ave.

West Peoria, IL

US 61604

Contact: Corey Dozard

cdozard@gflenv.com

T:

F:

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)