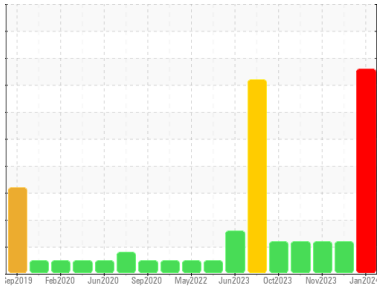
PROBLEM SUMMARY

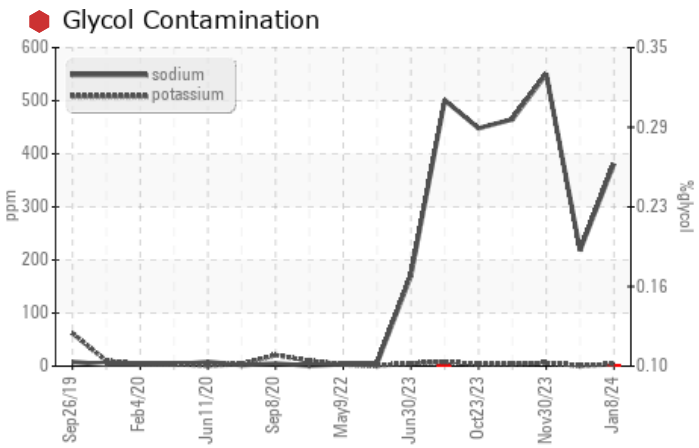
Sample Rating Trend

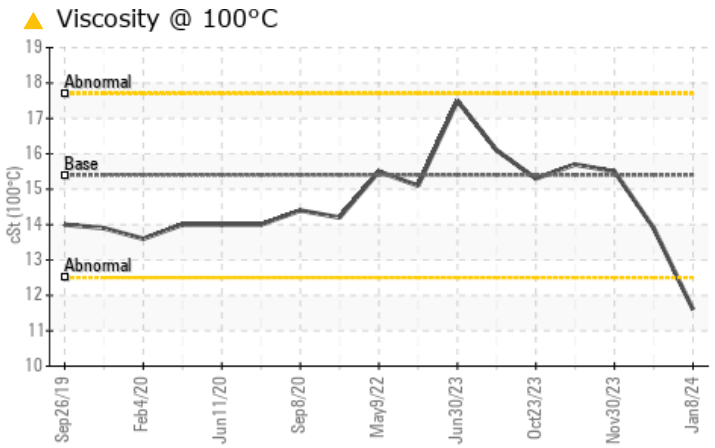


GLYCOL

Area
(83J3TW)
Machine Id
229035-632119
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. No other corrective action is recommended at this time.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	ABNORMAL
Glycol	%	*ASTM D2982		**0.10**	NEG	NEG
Visc @ 100°C	cSt	ASTM D445	15.4	**11.6**	13.9	15.5

Customer Id: GFL836
Sample No.: GFL0108172
Lab Number: 06064733
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
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

19 Dec 2023 Diag: Jonathan Hester

GLYCOL

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

view report

30 Nov 2023 Diag: Jonathan Hester

GLYCOL

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

view report

09 Nov 2023 Diag: Jonathan Hester

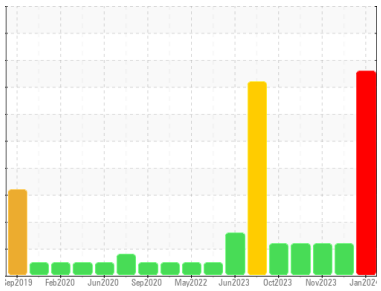
GLYCOL

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL

Area
(83J3TW)
Machine Id
229035-632119
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. No other corrective action is recommended at this time.

Wear

All component wear rates are normal.

Contamination

Test for glycol is positive. Light fuel dilution occurring. There is a high concentration of glycol present in the oil. No other contaminants were detected 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		**GFL0108172**	GFL0102434	GFL0102552
Sample Date		Client Info		**08 Jan 2024**	19 Dec 2023	30 Nov 2023
Machine Age	hrs	Client Info		**10216**	10096	9953
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	N/A	Not Changd
Sample Status				**SEVERE**	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	**16**	15	49
Chromium	ppm	ASTM D5185m	>20	**<1**	<1	1
Nickel	ppm	ASTM D5185m	>4	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**2**	1	6
Lead	ppm	ASTM D5185m	>40	**<1**	0	0
Copper	ppm	ASTM D5185m	>330	**<1**	<1	1
Tin	ppm	ASTM D5185m	>15	**<1**	<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	**4**	3	5
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	60	**76**	76	116
Manganese	ppm	ASTM D5185m	0	**0**	<1	0
Magnesium	ppm	ASTM D5185m	1010	**1016**	1156	1376
Calcium	ppm	ASTM D5185m	1070	**1137**	1264	1521
Phosphorus	ppm	ASTM D5185m	1150	**1090**	1201	1390
Zinc	ppm	ASTM D5185m	1270	**1299**	1469	1761
Sulfur	ppm	ASTM D5185m	2060	**2834**	3394	3502

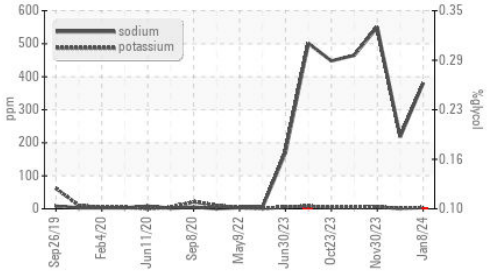
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**7**	5	11
Sodium	ppm	ASTM D5185m		▲ **381**	▲ 218	▲ 550
Potassium	ppm	ASTM D5185m	>20	**4**	1	6
Fuel	%	ASTM D3524	>5	**1.4**	<1.0	<1.0
Glycol	%	*ASTM D2982		● **0.10**	NEG	NEG

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.5**	0.3	0.7
Nitration	Abs/cm	*ASTM D7624	>20	**11.9**	9.7	14.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	**24.1**	23.0	29.9

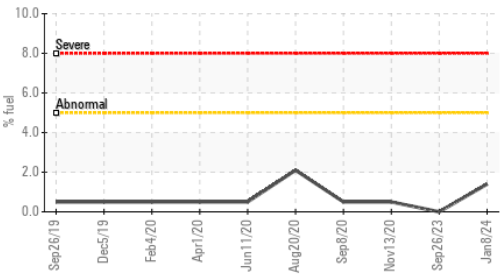
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**22.1**	19.6	28.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	**8.2**	8.8	8.8

OIL ANALYSIS REPORT

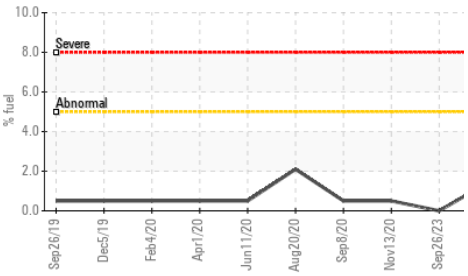
Glycol Contamination



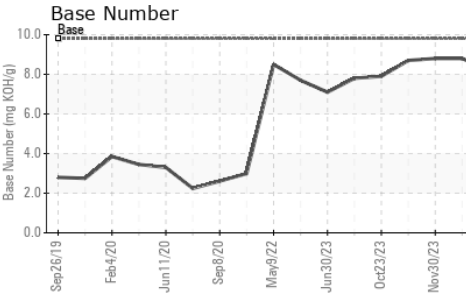
Fuel Dilution



Fuel Dilution



Base Number

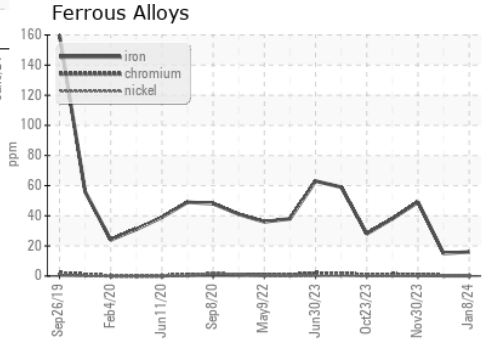


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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

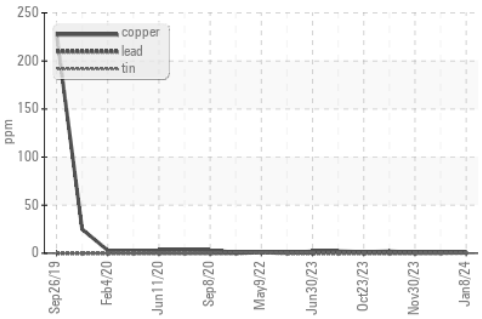
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	▲ **11.6**	13.9	15.5

GRAPHS

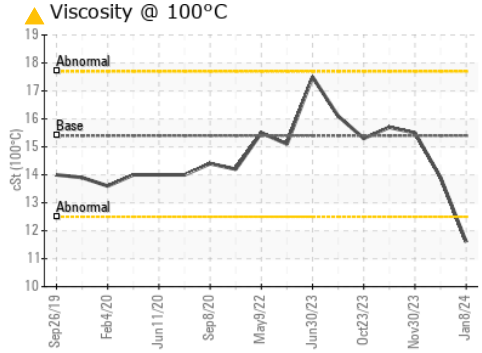
Ferrous Alloys



Non-ferrous Metals



▲ Viscosity @ 100°C



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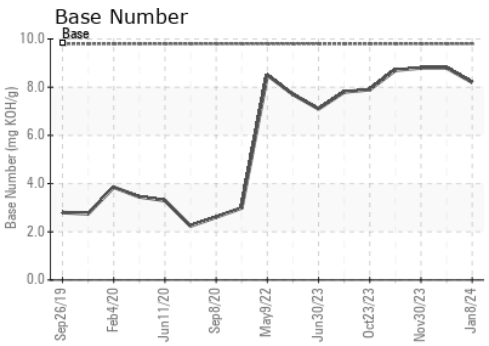

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0108172 **Recieved** : 18 Jan 2024
Lab Number : 06064733 **Diagnosed** : 01 Feb 2024
Unique Number : 10836115 **Diagnostician** : Wes Davis
Test Package : FLEET (Additional Tests: FuelDilution, Glycol, 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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