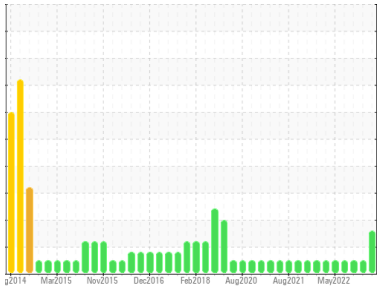
PROBLEM SUMMARY

Sample Rating Trend

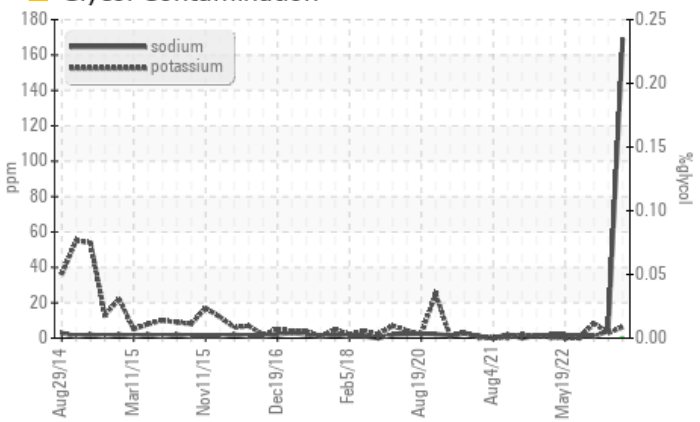


GLYCOL

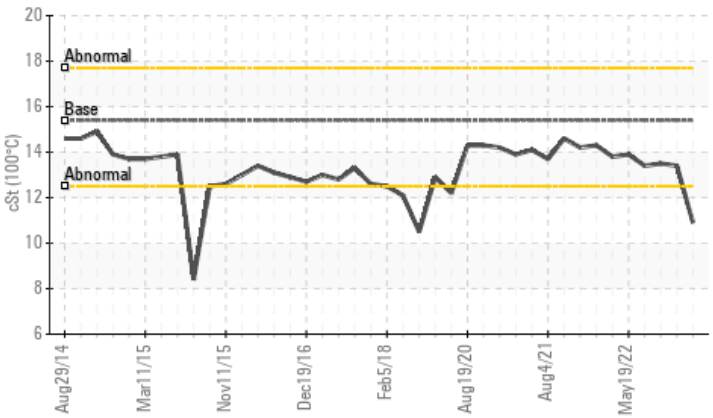
Machine Id
11153
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (48 GAL)

COMPONENT CONDITION SUMMARY

▲ Glycol Contamination



▲ Viscosity @ 100°C



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ATTENTION**	NORMAL	NORMAL
Sodium	ppm	ASTM D5185m		▲ **169**	4	<1
Visc @ 100°C	cSt	ASTM D445	15.4	▲ **10.9**	13.4	13.5

Customer Id: GFL045
Sample No.: GFL0060054
Lab Number: 05891931
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

04 Apr 2023 Diag: Doug Bogart

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

06 Dec 2022 Diag: Don Baldridge

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 Sep 2022 Diag: Wes Davis

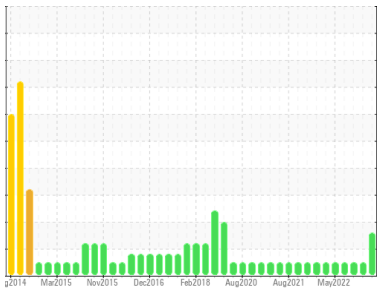
NORMAL

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
11153
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (48 GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
Sodium and/or potassium levels are high. Fuel content negligible. Test for glycol is negative.

Fluid Condition
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number		Client Info		**GFL0060054**	GFL0052207	GFL0060139
Sample Date		Client Info		**06 Jul 2023**	04 Apr 2023	06 Dec 2022
Machine Age	hrs	Client Info		**102410**	102410	102410
Oil Age	hrs	Client Info		**102410**	18011	17172
Oil Changed		Client Info		**N/A**	Changed	Changed
Sample Status				**ATTENTION**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>130	**31**	36	17
Chromium	ppm	ASTM D5185m	>10	**<1**	1	2
Nickel	ppm	ASTM D5185m	>4	**0**	<1	<1
Titanium	ppm	ASTM D5185m	>2	**0**	0	<1
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**10**	15	4
Lead	ppm	ASTM D5185m	>20	**0**	0	5
Copper	ppm	ASTM D5185m	>125	**<1**	1	<1
Tin	ppm	ASTM D5185m	>4	**0**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	<1	<1
Cadmium	ppm	ASTM D5185m		**0**	0	<1

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	**4**	2	28
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	60	**59**	97	98
Manganese	ppm	ASTM D5185m	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	1010	**837**	1533	67
Calcium	ppm	ASTM D5185m	1070	**931**	1685	2272
Phosphorus	ppm	ASTM D5185m	1150	**854**	1592	978
Zinc	ppm	ASTM D5185m	1270	**1049**	2039	1258
Sulfur	ppm	ASTM D5185m	2060	**2851**	4504	4057

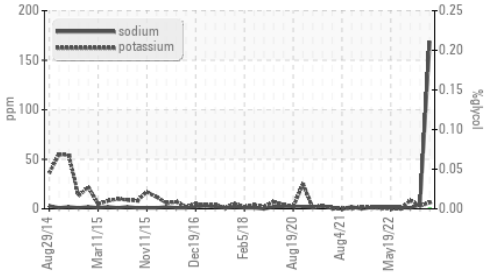
CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	**7**	8	4
Sodium	ppm	ASTM D5185m		▲ **169**	4	<1
Potassium	ppm	ASTM D5185m	>20	**6**	3	8
Fuel	%	ASTM D3524	>3.0	**0.2**	<1.0	<1.0
Glycol	%	*ASTM D2982		**0.0**	NEG	NEG

INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	>6	**1.1**	0.7	0.7
Nitration	Abs/cm	*ASTM D7624	>20	**12.8**	9.7	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	**22.9**	19.9	21.5

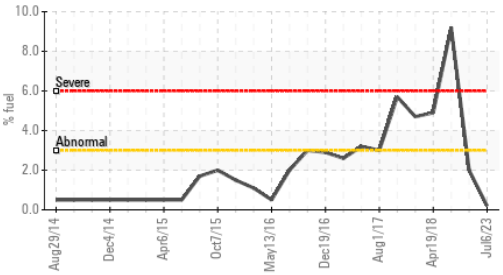
FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**19.7**	16.7	18.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	**6.6**	7.9	8.6

OIL ANALYSIS REPORT

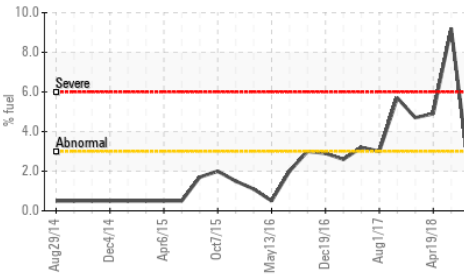
Glycol Contamination



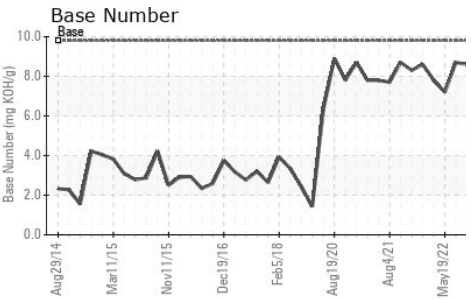
Fuel Dilution



Fuel Dilution



Base Number

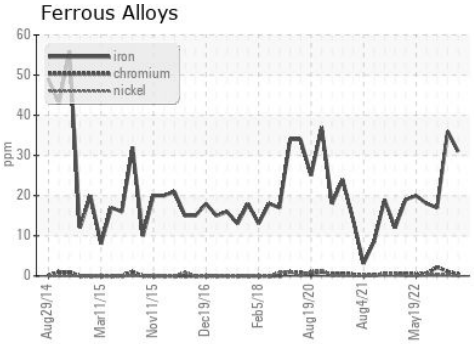


VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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

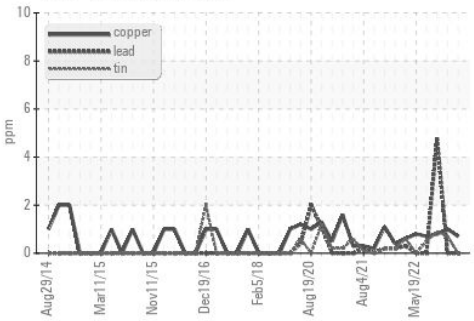
FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.4	▲ **10.9**	13.4	13.5

GRAPHS

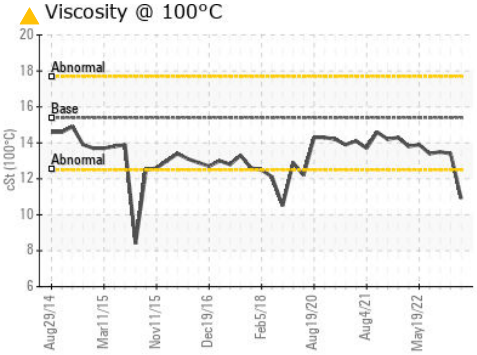
Ferrous Alloys



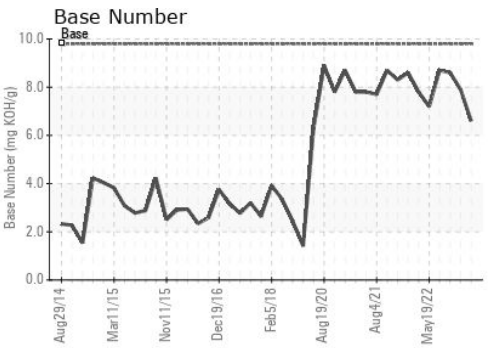
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0060054
Lab Number : 05891931
Unique Number : 10547741
Test Package : FLEET (Additional Tests: FuelDilution, Glycol, PercentFuel)

Received : 07 Jul 2023
Diagnosed : 10 Jul 2023
Diagnostician : Doug Bogart

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)

GFL Environmental - 045 - Tidewater
3821 Cook Blvd.
Chesapeake, VA
US 23323
Contact: ELVIN RODRIGUEZ
elvinrodriguez@gflenv.com
T:
F:

Report Id: GFL045 [WUSCAR] 05891931 (Generated: 07/10/2023 20:23:09) Rev: 1

Submitted By: MARIO OLIVAS