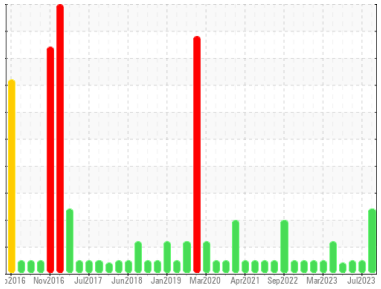
PROBLEM SUMMARY

Sample Rating Trend

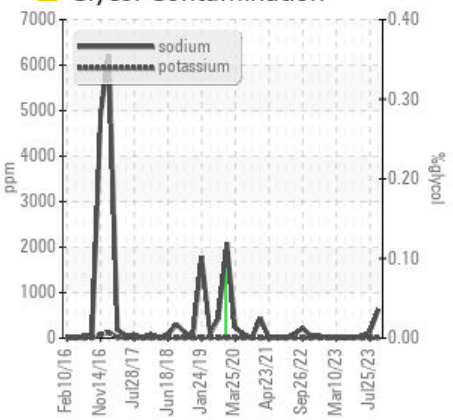


GLYCOL

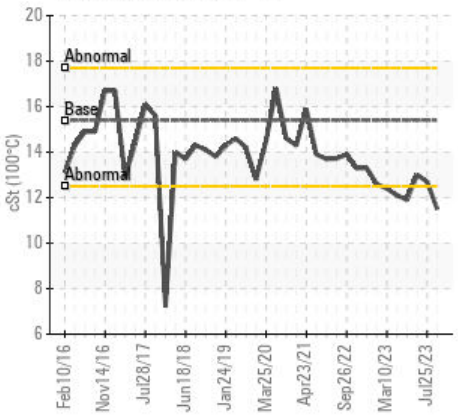
Machine Id
10623
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (13 GAL)

COMPONENT CONDITION SUMMARY

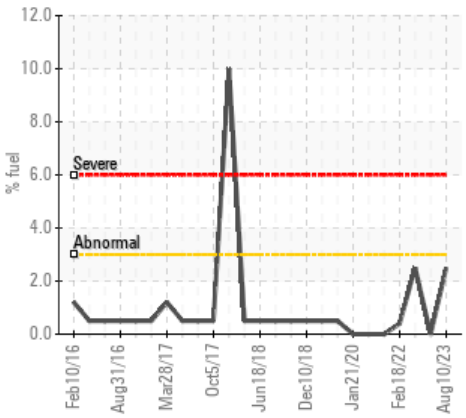
▲ Glycol Contamination



▲ Viscosity @ 100°C



▲ Fuel Dilution



RECOMMENDATION

We advise that you check for possible coolant leak. Check for low coolant level. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	NORMAL	NORMAL
Sodium	ppm	ASTM D5185m		▲ **630**	133	49
Fuel	%	ASTM D3524	>3.0	▲ **2.5**	<1.0	<1.0
Visc @ 100°C	cSt	ASTM D445	15.4	▲ **11.5**	12.7	13.0

Customer Id: GFL010
Sample No.: GFL0088745
Lab Number: 05927021
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
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

25 Jul 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

15 Jul 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

24 May 2023 Diag: Don Baldridge

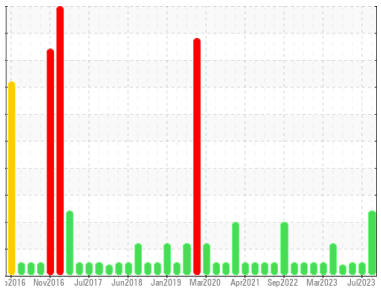
VISCOSITY

Oil and filter change at the time of sampling has been noted. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL

Machine Id
10623
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (13 GAL)

DIAGNOSIS

Recommendation

We advise that you check for possible coolant leak. Check for low coolant level. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Light fuel dilution occurring.

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	history1	history2
Sample Number		Client Info		**GFL0088745**	GFL0086099	GFL0086150
Sample Date		Client Info		**10 Aug 2023**	25 Jul 2023	15 Jul 2023
Machine Age	hrs	Client Info		**18436**	18306	18222
Oil Age	hrs	Client Info		**135**	1049	965
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**ABNORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>75	**6**	11	7
Chromium	ppm	ASTM D5185m	>5	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>4	**<1**	0	0
Titanium	ppm	ASTM D5185m	>2	**<1**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>15	**1**	2	2
Lead	ppm	ASTM D5185m	>25	**<1**	0	0
Copper	ppm	ASTM D5185m	>100	**3**	<1	<1
Tin	ppm	ASTM D5185m	>4	**0**	0	0
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**35**	12	0
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	60	**67**	64	60
Manganese	ppm	ASTM D5185m	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	1010	**650**	843	825
Calcium	ppm	ASTM D5185m	1070	**922**	1092	1090
Phosphorus	ppm	ASTM D5185m	1150	**815**	969	942
Zinc	ppm	ASTM D5185m	1270	**994**	1182	1173
Sulfur	ppm	ASTM D5185m	2060	**2962**	3480	3458

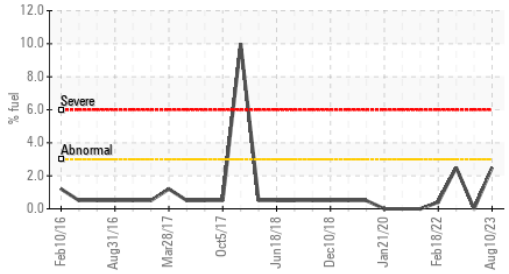
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**12**	7	5
Sodium	ppm	ASTM D5185m		▲ **630**	133	49
Potassium	ppm	ASTM D5185m	>20	**7**	<1	2
Fuel	%	ASTM D3524	>3.0	▲ **2.5**	<1.0	<1.0
Glycol	%	*ASTM D2982		**NEG**	0.0	NEG

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	**0.2**	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	**7.0**	7.4	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	**15.7**	18.5	18.1

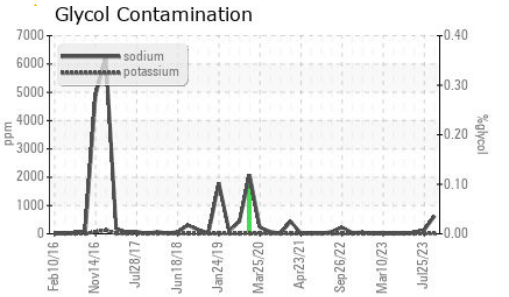
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**10.4**	13.0	12.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	**9.6**	8.1	7.9

OIL ANALYSIS REPORT

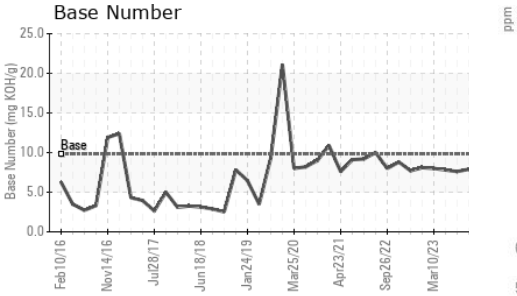
Fuel Dilution



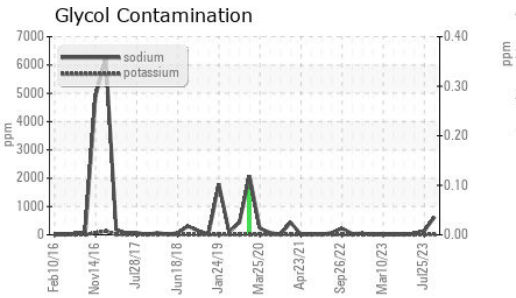
Glycol Contamination



Base Number



Glycol Contamination

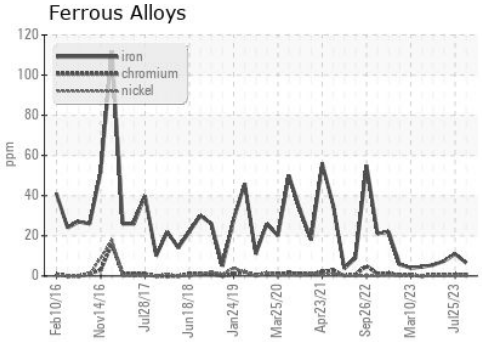


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

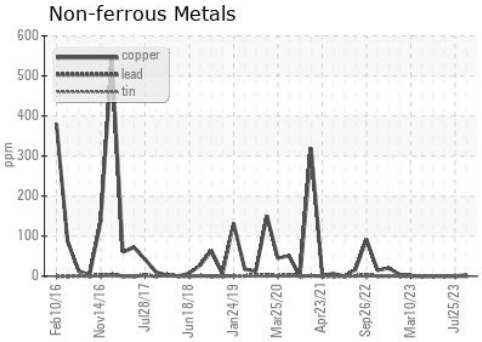
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	▲ **11.5**	12.7	13.0

GRAPHS

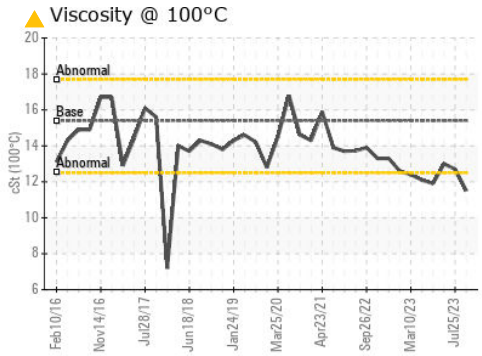
Ferrous Alloys



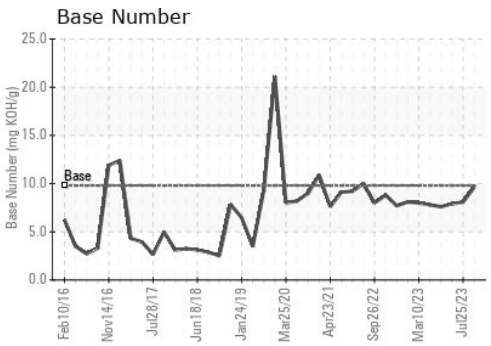
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0088745 **Received** : 17 Aug 2023
Lab Number : 05927021 **Diagnosed** : 21 Aug 2023
Unique Number : 10606968 **Diagnostician** : Jonathan Hester
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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