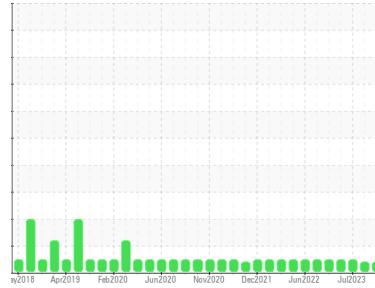




PROBLEM SUMMARY

Sample Rating Trend



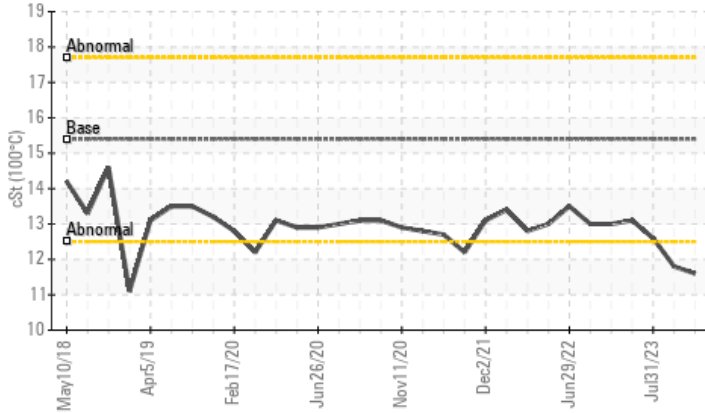
VISCOSITY



Machine Id
2703
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (11 GAL)

COMPONENT CONDITION SUMMARY

▲ Viscosity @ 100°C



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ATTENTION	NORMAL
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.6	▲ 11.8	12.6

Customer Id: GFL095
 Sample No.: GFL0074627
 Lab Number: 06025579
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Sean Felton +1 919-379-4092
sfelton@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	---	---	?	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.

HISTORICAL DIAGNOSIS

04 Oct 2023 Diag: Don Baldrige

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. Fuel content negligible. 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](#)



31 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](#)



17 May 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.

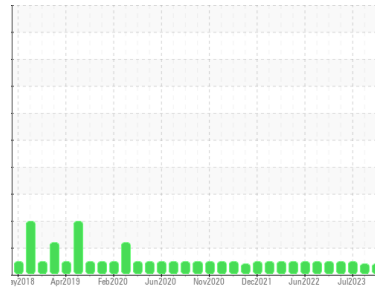
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
2703

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (11 GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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	GFL0074627	GFL0092479	GFL0074610
Sample Date	Client Info	01 Dec 2023	04 Oct 2023	31 Jul 2023
Machine Age	hrs	17574	17077	16460
Oil Age	hrs	0	617	607
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		ATTENTION	ATTENTION	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	0.3	<1.0
Water	WC Method >0.2	NEG	NEG	NEG
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	8	14	14
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	1	4	3
Lead	ppm ASTM D5185m >40	0	5	7
Copper	ppm ASTM D5185m >330	<1	1	1
Tin	ppm ASTM D5185m >15	0	<1	<1
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	3	<1	7
Barium	ppm ASTM D5185m 0	2	0	0
Molybdenum	ppm ASTM D5185m 60	55	57	62
Manganese	ppm ASTM D5185m 0	0	<1	<1
Magnesium	ppm ASTM D5185m 1010	718	787	812
Calcium	ppm ASTM D5185m 1070	891	947	1128
Phosphorus	ppm ASTM D5185m 1150	817	926	986
Zinc	ppm ASTM D5185m 1270	997	1108	1174
Sulfur	ppm ASTM D5185m 2060	2591	2787	2892

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	6	10	9
Sodium	ppm ASTM D5185m	2	5	3
Potassium	ppm ASTM D5185m >20	2	2	3

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.3	0.4	0.5
Nitration	Abs/cm *ASTM D7624 >20	8.3	9.1	10.2
Sulfation	Abs/.1mm *ASTM D7415 >30	18.3	20.0	21.8

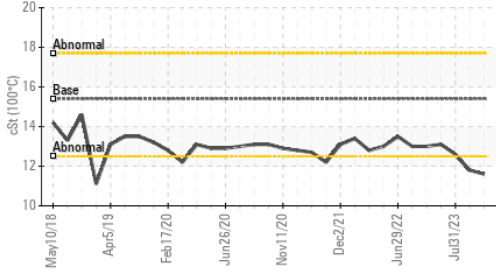
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	14.2	16.5	18.0
Base Number (BN)	mg KOH/g ASTM D2896 9.8	6.6	5.2	5.9

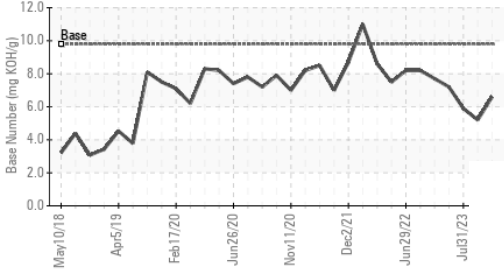


OIL ANALYSIS REPORT

▲ Viscosity @ 100°C



Base Number

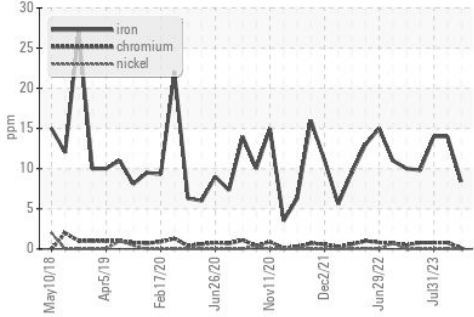


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

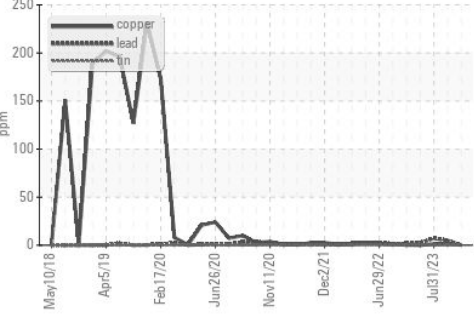
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4 ▲ 11.6	▲ 11.8	12.6

GRAPHS

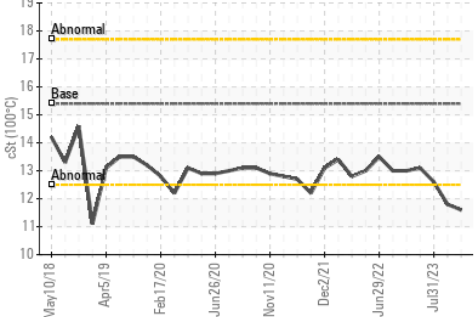
Ferrous Alloys



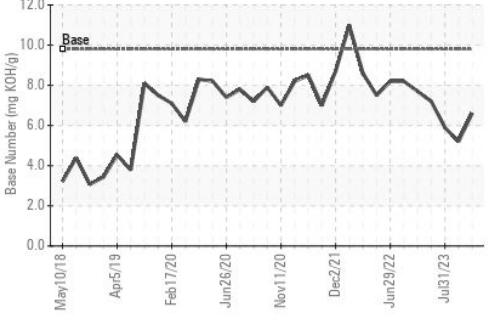
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0074627
Lab Number : 06025579
Unique Number : 10770079
Test Package : FLEET

Received : 05 Dec 2023
Diagnosed : 07 Dec 2023
Diagnostician : Sean Felton

GFL Environmental - 095 - Atlanta West
 2699 Cochran Industrial Blvd
 Douglasville, GA
 US 30127-1332
 Contact: Darrell Welch
 darrell.welch@gflenv.com
 T: (800)207-6618
 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)