



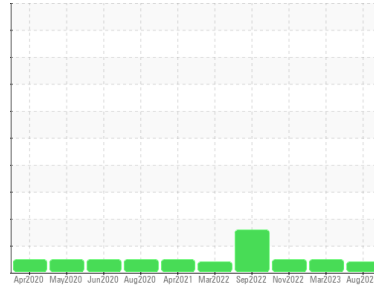
PROBLEM SUMMARY

Sample Rating Trend

VISCOSITY

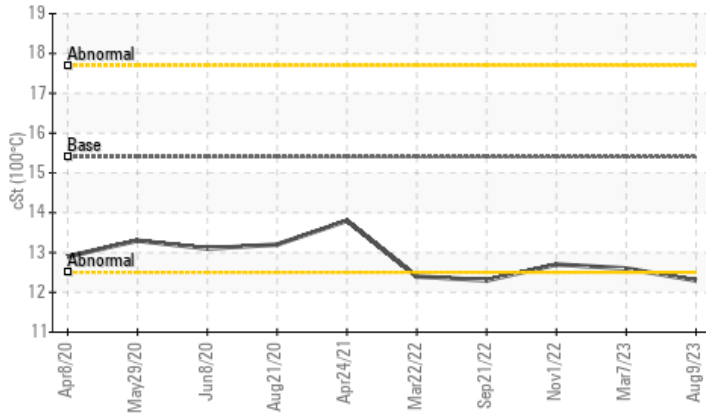


Machine Id
927013-9025
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)



COMPONENT CONDITION SUMMARY

▲ Viscosity @ 100°C



RECOMMENDATION

No corrective action is recommended at this time.
 Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	NORMAL	NORMAL
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 12.3	12.6	12.7

Customer Id: GFL663
 Sample No.: GFL0079790
 Lab Number: 05929309
 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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

07 Mar 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. 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



01 Nov 2022 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Metal levels are typical for a new component breaking in. 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



21 Sep 2022 Diag: Jonathan Hester

GLYCOL



Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. Test for glycol is negative. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

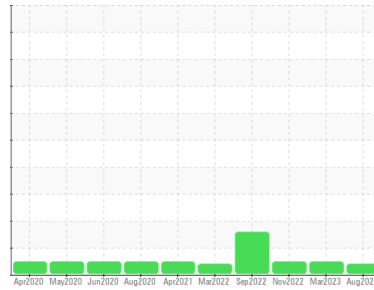
view report





OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
927013-9025
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. 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	GFL0079790	GFL0067418	GFL0055048
Sample Date	Client Info	09 Aug 2023	07 Mar 2023	01 Nov 2022
Machine Age	hrs	3044	1806	830
Oil Age	hrs	3044	1806	830
Oil Changed	Client Info	Not Chngd	Changed	Changed
Sample Status		ATTENTION	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >120	11	15	9
Chromium	ppm	ASTM D5185m >20	<1	0	<1
Nickel	ppm	ASTM D5185m >5	2	<1	<1
Titanium	ppm	ASTM D5185m >2	6	17	23
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >20	4	4	4
Lead	ppm	ASTM D5185m >40	0	1	<1
Copper	ppm	ASTM D5185m >330	0	1	1
Tin	ppm	ASTM D5185m >15	0	<1	<1
Vanadium	ppm	ASTM D5185m	0	<1	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	18	15	29
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 60	72	47	45
Manganese	ppm	ASTM D5185m 0	0	<1	<1
Magnesium	ppm	ASTM D5185m 1010	1144	753	767
Calcium	ppm	ASTM D5185m 1070	1388	1264	1332
Phosphorus	ppm	ASTM D5185m 1150	1202	868	957
Zinc	ppm	ASTM D5185m 1270	1639	1143	1158
Sulfur	ppm	ASTM D5185m 2060	4754	2848	3640

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	4	4	4
Sodium	ppm	ASTM D5185m	8	30	32
Potassium	ppm	ASTM D5185m >20	0	0	1
Fuel	%	ASTM D3524 >3.0	1.3	<1.0	<1.0

INFRA-RED

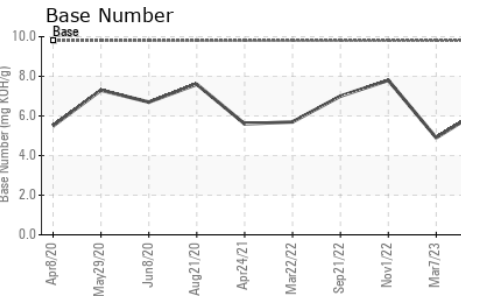
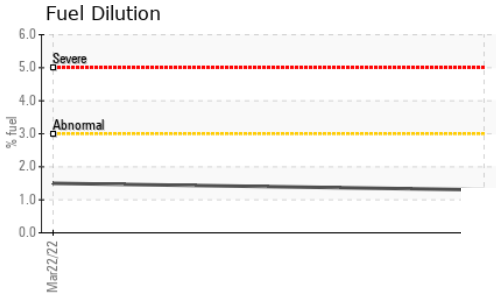
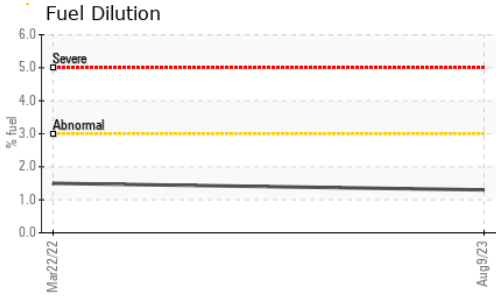
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >4	0.2	0.4	0.3
Nitration	Abs/cm	*ASTM D7624 >20	8.3	9.6	8.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.4	24.4	21.6

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	17.1	21.3	17.3
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	6.4	4.9	7.8



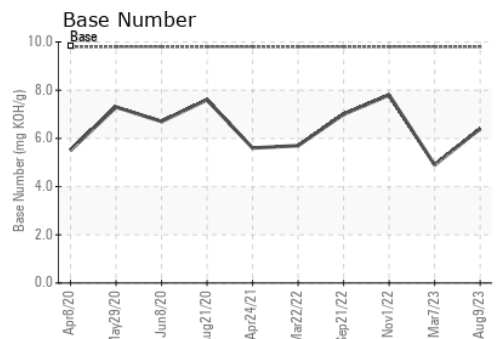
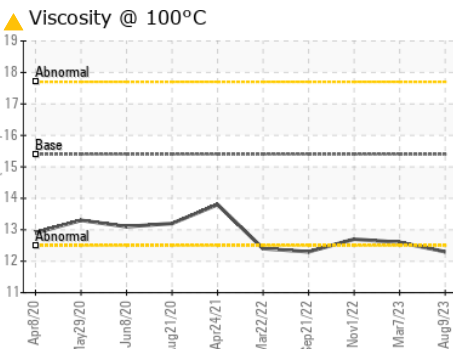
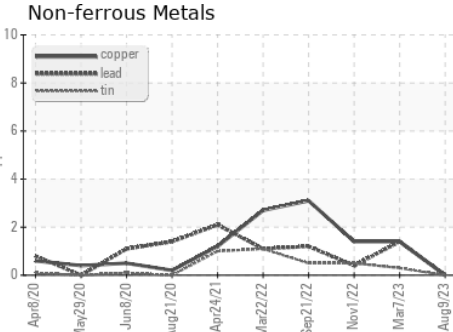
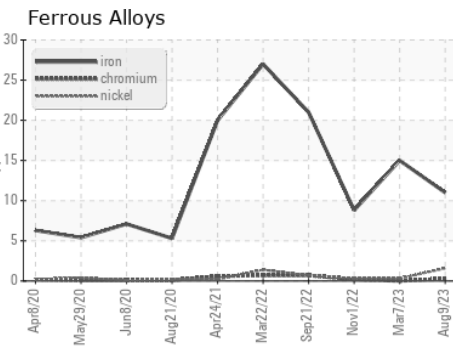
OIL ANALYSIS REPORT



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 ▲ 12.3	12.6	12.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0079790 **Received** : 21 Aug 2023
Lab Number : 05929309 **Diagnosed** : 23 Aug 2023
Unique Number : 10609256 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 663 - Lake Ariel (Scranton Hauling)
 17 Industrial Park Rd
 Lake Ariel, PA
 US 18436
 Contact: Eric Merone
 emerone@countyrecycling.net

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)