



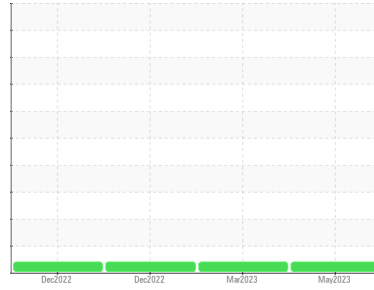
PROBLEM SUMMARY

Sample Rating Trend

VISCOSITY

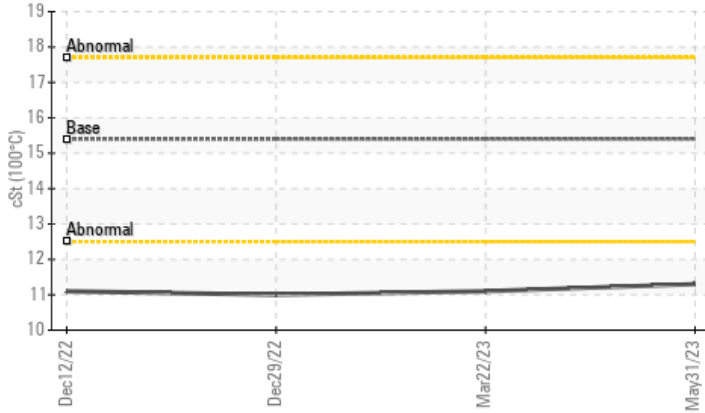


Machine Id
713016
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)



COMPONENT CONDITION SUMMARY

▲ Viscosity @ 100°C



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ATTENTION	ATTENTION
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.3	▲ 11.1	▲ 11.0

Customer Id: GFL123
Sample No.: GFL0079886
Lab Number: 05894812
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

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

22 Mar 2023 Diag: Don Baldrige

VISCOSITY



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



29 Dec 2022 Diag: Don Baldrige

VISCOSITY



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



12 Dec 2022 Diag: Doug Bogart

VISCOSITY



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

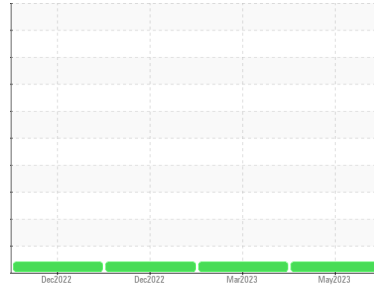




OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY



Machine Id
713016
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

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	history 1	history 2
Sample Number	Client Info		GFL0079886	GFL0074077	GFL0069325
Sample Date	Client Info		31 May 2023	22 Mar 2023	29 Dec 2022
Machine Age	hrs	Client Info	0	1668	1163
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Chngd	N/A	N/A
Sample Status			ATTENTION	ATTENTION	ATTENTION

CONTAMINATION

	method	limit/base	current	history 1	history 2
Fuel	WC Method	>3.0	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >120	14	22	22
Chromium	ppm	ASTM D5185m >20	<1	1	<1
Nickel	ppm	ASTM D5185m >5	1	3	<1
Titanium	ppm	ASTM D5185m >2	<1	0	0
Silver	ppm	ASTM D5185m >2	<1	0	<1
Aluminum	ppm	ASTM D5185m >20	2	<1	<1
Lead	ppm	ASTM D5185m >40	<1	<1	<1
Copper	ppm	ASTM D5185m >330	12	34	43
Tin	ppm	ASTM D5185m >15	1	2	2
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 0	6	15	20
Barium	ppm	ASTM D5185m 0	0	0	2
Molybdenum	ppm	ASTM D5185m 60	58	55	69
Manganese	ppm	ASTM D5185m 0	<1	1	1
Magnesium	ppm	ASTM D5185m 1010	861	817	814
Calcium	ppm	ASTM D5185m 1070	1127	1287	1128
Phosphorus	ppm	ASTM D5185m 1150	906	902	919
Zinc	ppm	ASTM D5185m 1270	1189	1286	1098
Sulfur	ppm	ASTM D5185m 2060	3220	2810	2430

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	4	6	11
Sodium	ppm	ASTM D5185m	2	2	0
Potassium	ppm	ASTM D5185m >20	2	3	2

INFRA-RED

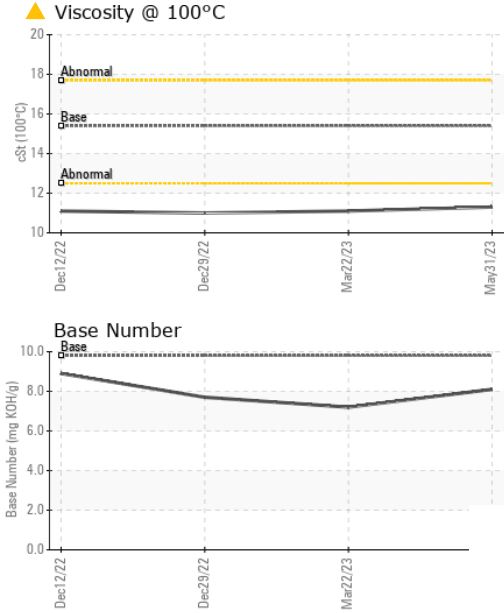
	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844 >4	0.6	0.7	0.6
Nitration	Abs/cm	*ASTM D7624 >20	7.6	8.4	7.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.1	20.0	19.8

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	15.2	15.0	15
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	8.1	7.2	7.7



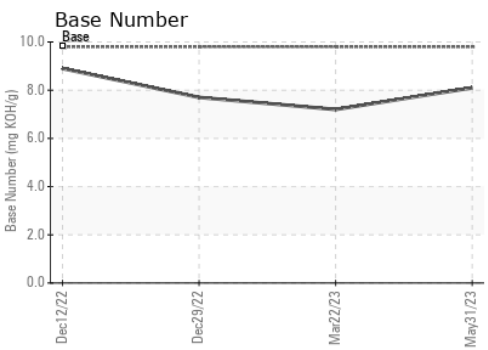
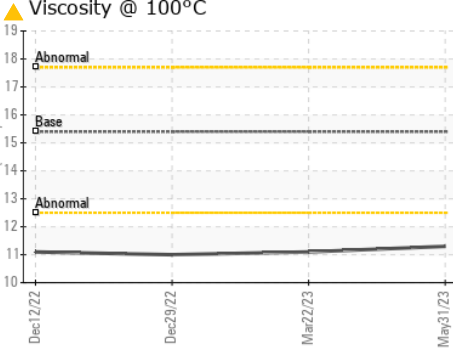
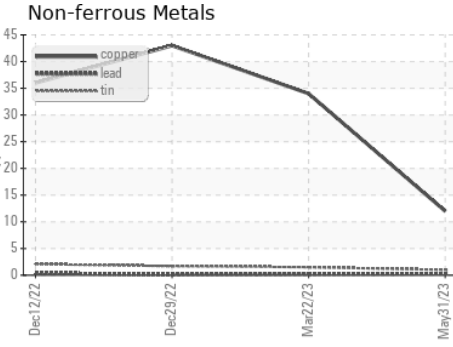
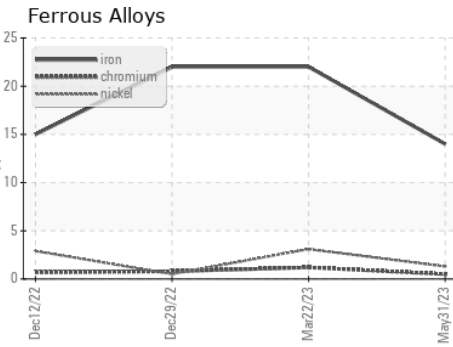
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2	
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.3	▲ 11.1	▲ 11.0

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0079886 **Received** : 11 Jul 2023
Lab Number : 05894812 **Diagnosed** : 12 Jul 2023
Unique Number : 10550622 **Diagnostician** : Don Baldrige
Test Package : FLEET

GFL Environmental - 123 - Best Way Disposal
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 Colorado Springs, CO
 US 80903
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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)