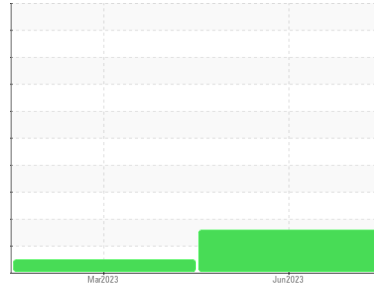




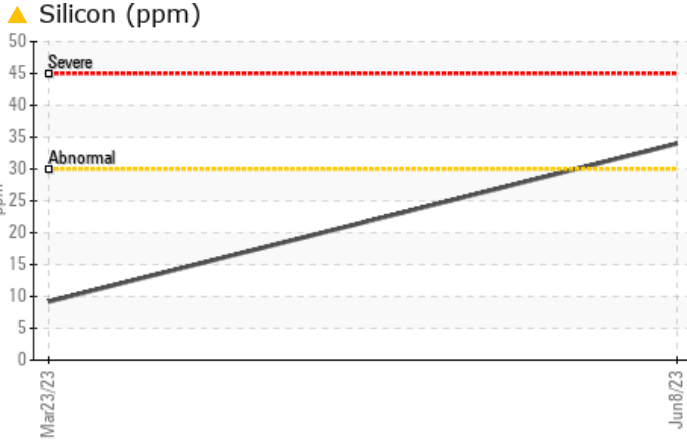
PROBLEM SUMMARY

Sample Rating Trend



Machine Id
927050
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	---
Silicon	ppm	ASTM D5185m	>30	▲ 34	9	---

Customer Id: GFL916
 Sample No.: GFL0067008
 Lab Number: 05902165
 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

Action	Status	Date	Done By	Description
Check Dirt Access	---	---	?	We advise that you check the air filter, air induction system, and any areas where dirt may enter the component.

HISTORICAL DIAGNOSIS

23 Mar 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.

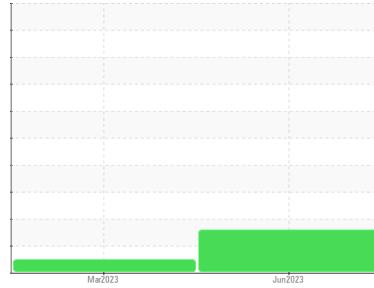
view report





OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
927050

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

Elemental level of silicon (Si) above normal.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			GFL0067008	GFL0067020	---
Sample Date	Client Info			08 Jun 2023	23 Mar 2023	---
Machine Age	hrs	Client Info		14171	13826	---
Oil Age	hrs	Client Info		0	13826	---
Oil Changed	Client Info			N/A	Changed	---
Sample Status				ABNORMAL	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	---
Glycol	WC Method			NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	4	46	---
Chromium	ppm	ASTM D5185m	>4	<1	2	---
Nickel	ppm	ASTM D5185m	>2	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>25	1	18	---
Lead	ppm	ASTM D5185m	>45	<1	3	---
Copper	ppm	ASTM D5185m	>85	1	11	---
Tin	ppm	ASTM D5185m	>4	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	11	89	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	60	63	131	---
Manganese	ppm	ASTM D5185m	0	<1	<1	---
Magnesium	ppm	ASTM D5185m	1010	1018	1335	---
Calcium	ppm	ASTM D5185m	1070	1231	2141	---
Phosphorus	ppm	ASTM D5185m	1150	1122	1472	---
Zinc	ppm	ASTM D5185m	1270	1332	1860	---
Sulfur	ppm	ASTM D5185m	2060	4032	4675	---

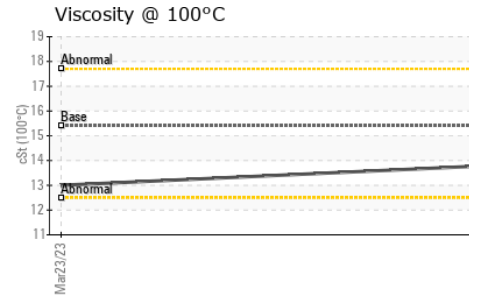
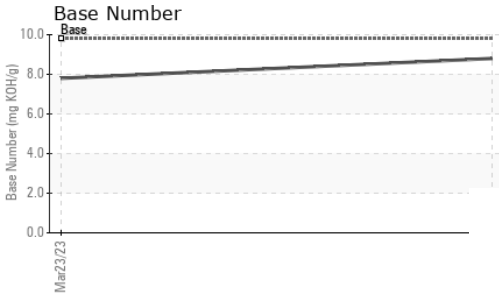
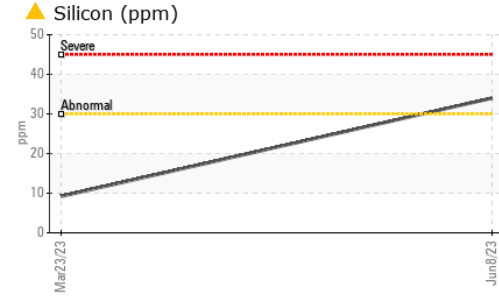
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	▲ 34	9	---
Sodium	ppm	ASTM D5185m		3	8	---
Potassium	ppm	ASTM D5185m	>20	3	34	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.7	---
Nitration	Abs/cm	*ASTM D7624	>20	5.5	9.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9	21.8	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6	16.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.8	7.8	---



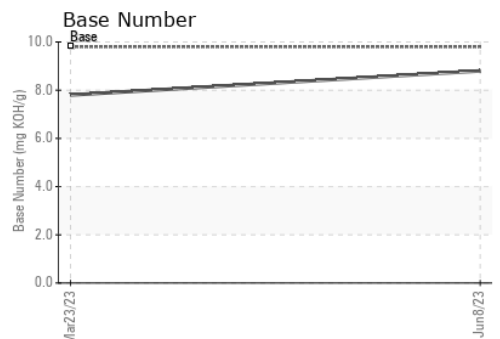
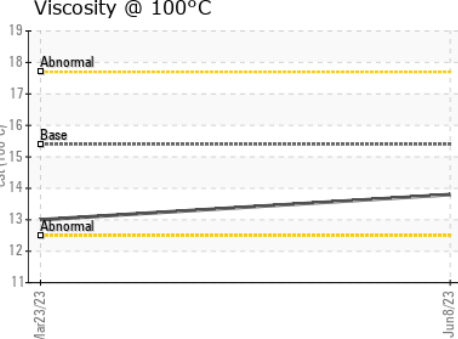
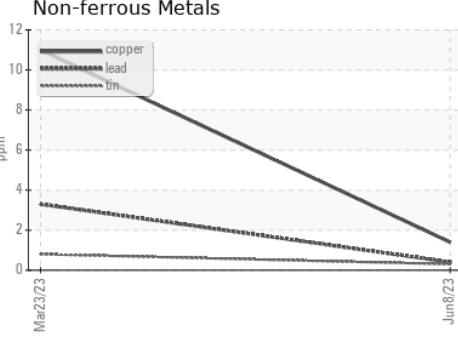
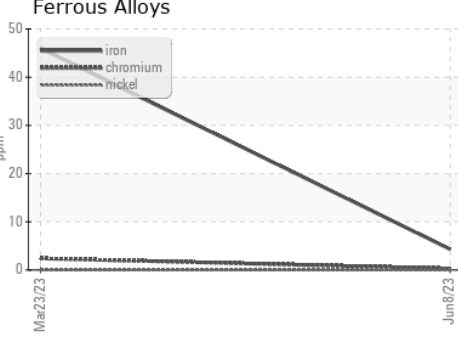
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	13.0

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0067008 **Received** : 19 Jul 2023
Lab Number : 05902165 **Diagnosed** : 21 Jul 2023
Unique Number : 10563521 **Diagnostician** : Don Baldrige
Test Package : FLEET

GFL Environmental - 916 - Greenbay HC
 1799 County Trunk PP
 DePere, WI
 US 54115
 Contact: Travis Runge
 travis.runge@gflenv.com
 T: (920)351-2341
 F:

Certificate L2367
 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)