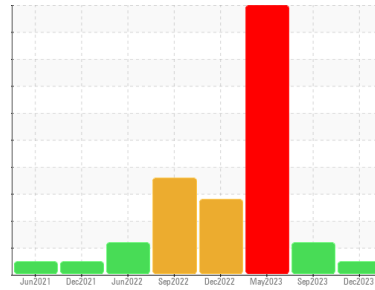




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
7810M

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0107101	GFL0091473	GFL0081229
Sample Date	Client Info		20 Dec 2023	18 Sep 2023	10 May 2023
Machine Age	hrs	Client Info	14795	13161	13143
Oil Age	hrs	Client Info	600	600	600
Oil Changed	Client Info		Not Changed	N/A	Not Changed
Sample Status			NORMAL	ABNORMAL	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	0.10

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	4	20	67
Chromium	ppm	ASTM D5185m >20	<1	<1	3
Nickel	ppm	ASTM D5185m >4	0	<1	<1
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >3	0	<1	0
Aluminum	ppm	ASTM D5185m >20	2	1	4
Lead	ppm	ASTM D5185m >40	0	0	2
Copper	ppm	ASTM D5185m >330	0	28	40
Tin	ppm	ASTM D5185m >15	0	<1	1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<1	29	179
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 60	57	114	596
Manganese	ppm	ASTM D5185m 0	0	<1	1
Magnesium	ppm	ASTM D5185m 1010	897	892	849
Calcium	ppm	ASTM D5185m 1070	1030	1006	964
Phosphorus	ppm	ASTM D5185m 1150	962	1036	929
Zinc	ppm	ASTM D5185m 1270	1171	1221	1159
Sulfur	ppm	ASTM D5185m 2060	3332	3792	3455

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	4	20	125
Sodium	ppm	ASTM D5185m	0	1094	6008
Potassium	ppm	ASTM D5185m >20	2	10	62

INFRA-RED

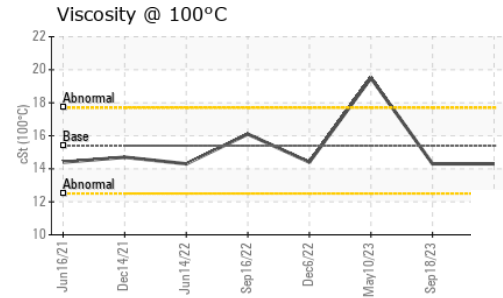
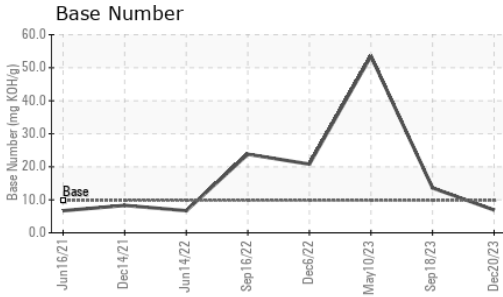
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.1	0.3	2.4
Nitration	Abs/cm	*ASTM D7624 >20	4.8	7.2	26.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	16.9	17.6	29.0

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	12.5	12.8	17.6
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	6.9	13.6	53.5



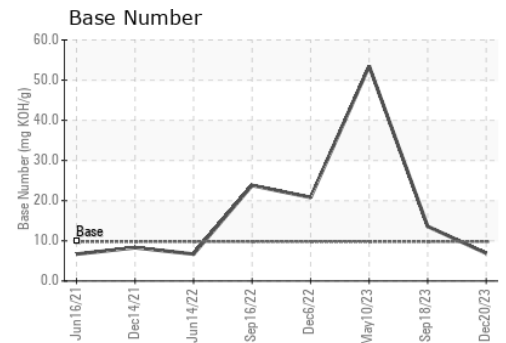
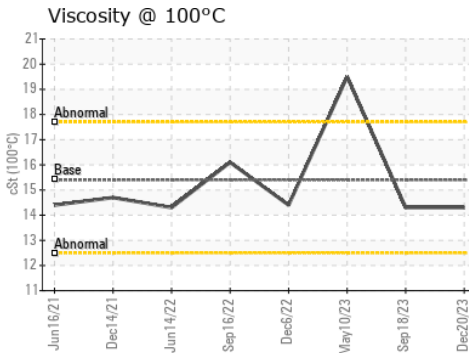
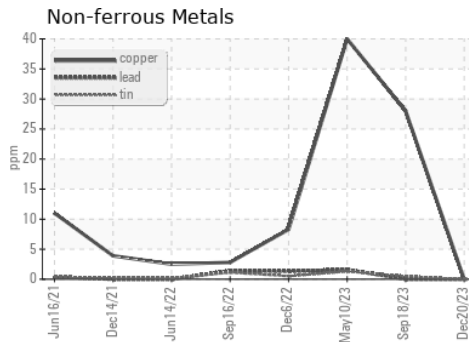
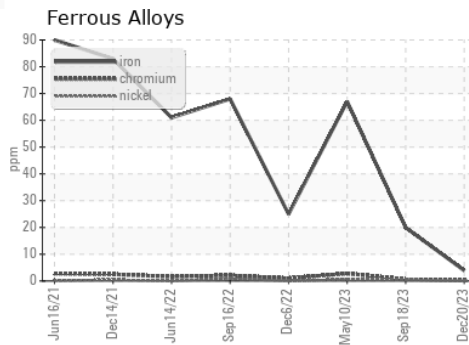
OIL ANALYSIS REPORT



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	14.3	▲ 19.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0107101
 Lab Number : 06045883
 Unique Number : 10806491
 Test Package : FLEET

GFL Environmental - 465 - Pontiac
 888 Baldwin
 Pontiac, MI
 US 48340

Contact: Ricky Matthews
 rickymathews@gflenv.com
 T: (586)825-9514

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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