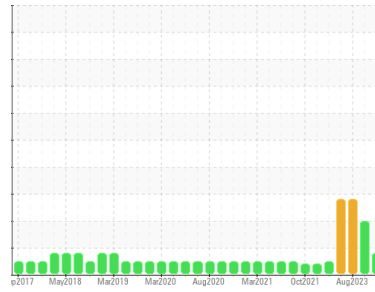




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id

10800

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (11 GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			GFL0072124	GFL0072048	GFL0072062
Sample Date	Client Info			19 Apr 2024	05 Dec 2023	09 Aug 2023
Machine Age	hrs	Client Info		17627	17044	16802
Oil Age	hrs	Client Info		453	600	560
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				ABNORMAL	SEVERE	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
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	12	6	11
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	6	4	1
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	0	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	4	26	2
Barium	ppm	ASTM D5185m	0	0	0	2
Molybdenum	ppm	ASTM D5185m	60	60	56	46
Manganese	ppm	ASTM D5185m	0	<1	<1	0
Magnesium	ppm	ASTM D5185m	1010	876	592	624
Calcium	ppm	ASTM D5185m	1070	1001	827	797
Phosphorus	ppm	ASTM D5185m	1150	986	604	718
Zinc	ppm	ASTM D5185m	1270	1147	755	869
Sulfur	ppm	ASTM D5185m	2060	3221	2146	2345

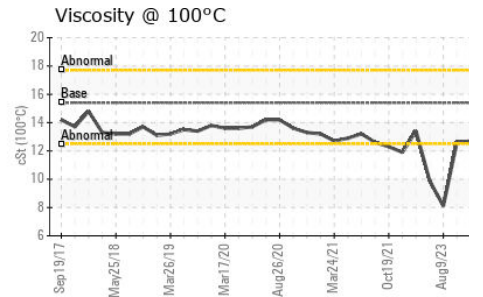
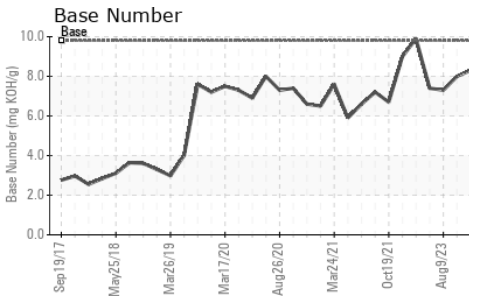
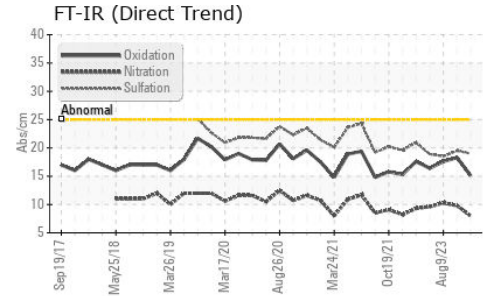
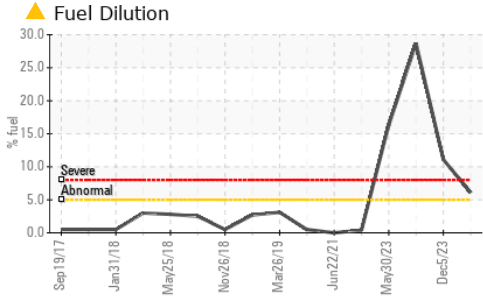
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	6	2
Sodium	ppm	ASTM D5185m		2	1	0
Potassium	ppm	ASTM D5185m	>20	12	12	5
Fuel	%	ASTM D3524	>5	▲ 6.1	▲ 11.1	▲ 28.7

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.0	9.8	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	19.5	18.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	18.3	17.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.3	8.0	7.3



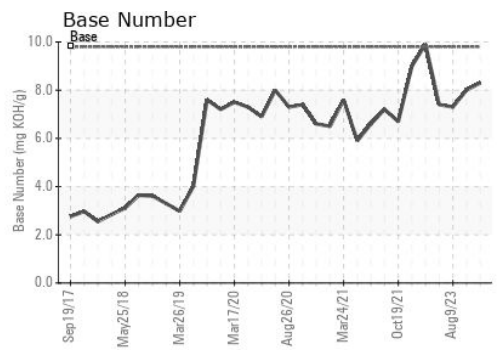
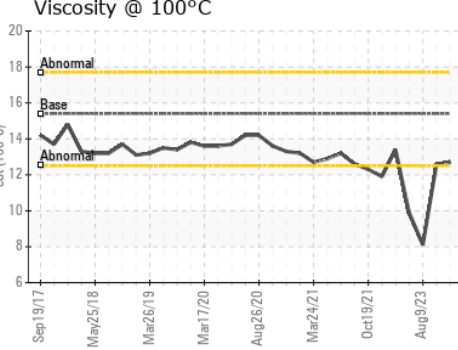
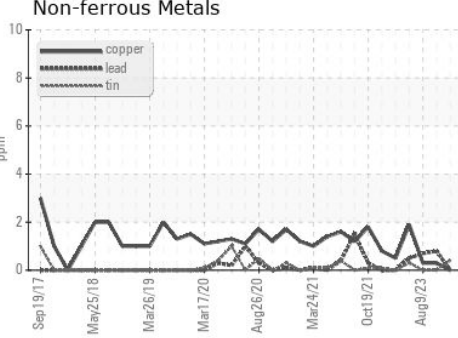
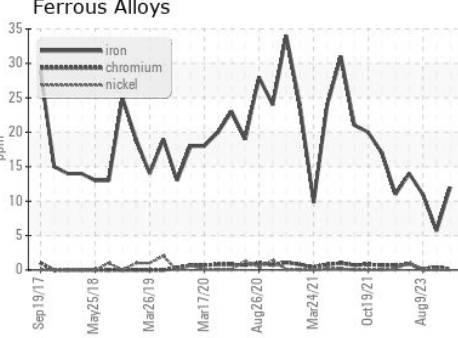
OIL ANALYSIS REPORT



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	12.7	12.6 ▲ 8.1

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0072124 **Received** : 23 Apr 2024
Lab Number : 06157281 **Tested** : 25 Apr 2024
Unique Number : 10992704 **Diagnosed** : 25 Apr 2024 - Wes Davis
Test Package : FLEET (Additional Tests: PercentFuel)

GFL Environmental - 094 - Cedartown
 2097 Buchanan Highway
 Cedartown, GA
 US 30125
 Contact: WILLIAM FOSTER
 william.foster@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)