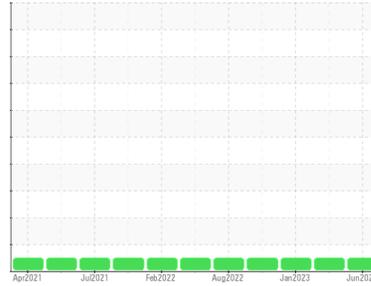




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

3819

Component

Diesel Engine

Fluid

PETRO CANADA DURON UHP E6 10W40 (9 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		GFL0027696	GFL0027691	GFL0027711
Sample Date	Client Info		30 Jun 2023	29 Mar 2023	18 Jan 2023
Machine Age	hrs	Client Info	18943	18147	17600
Oil Age	hrs	Client Info	800	500	650
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.1	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>51	30	22	35
Chromium	ppm	ASTM D5185m	>11	1	<1	2
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>31	5	2	4
Lead	ppm	ASTM D5185m	>26	1	<1	2
Copper	ppm	ASTM D5185m	>26	1	0	<1
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	9	11	14
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	65	63	63
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	80	802	840	829
Calcium	ppm	ASTM D5185m	2400	1134	1127	1095
Phosphorus	ppm	ASTM D5185m	750	957	938	933
Zinc	ppm	ASTM D5185m	840	1147	1168	1135
Sulfur	ppm	ASTM D5185m	2130	3098	3123	3233

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>22	6	4	5
Sodium	ppm	ASTM D5185m	>31	0	<1	2
Potassium	ppm	ASTM D5185m	>20	<1	0	0

INFRA-RED

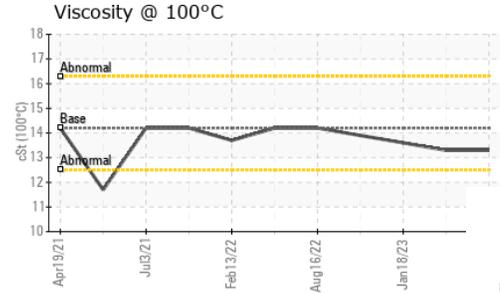
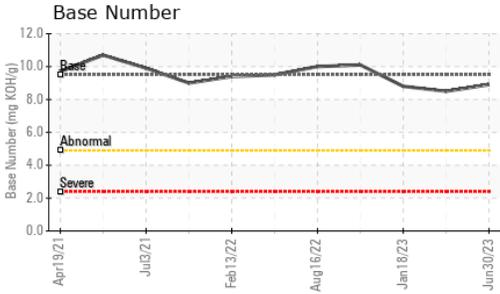
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.8	0.6	0.9
Nitration	Abs/cm	*ASTM D7624	>20	7.2	7.7	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8	18.2	18.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.0	14.4	13.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.5	8.9	8.5	8.8



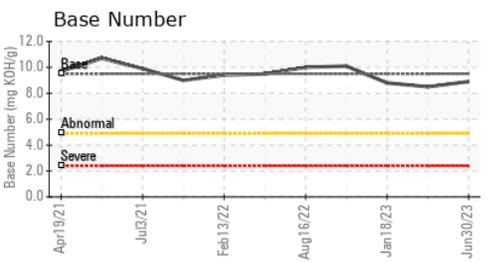
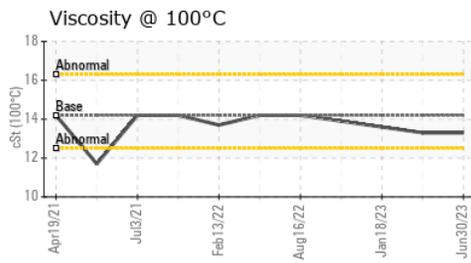
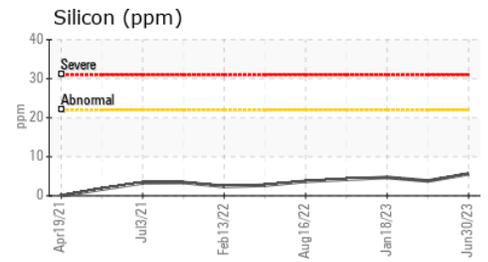
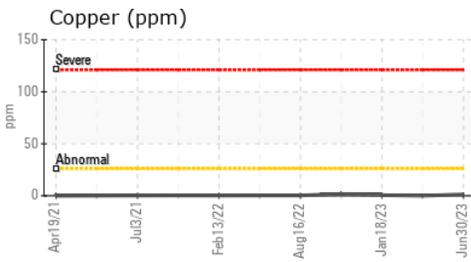
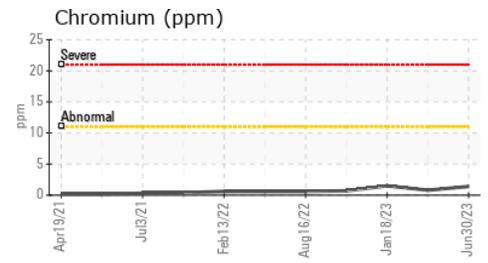
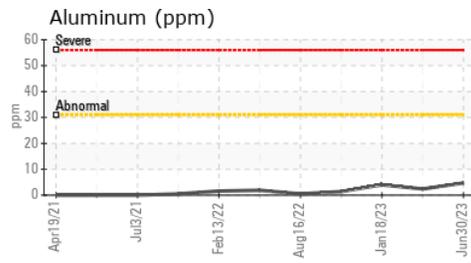
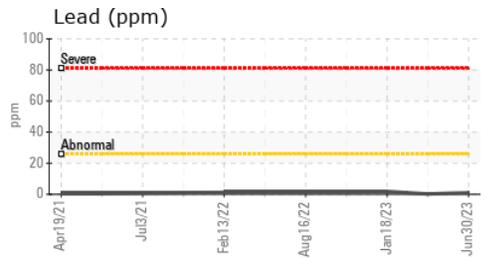
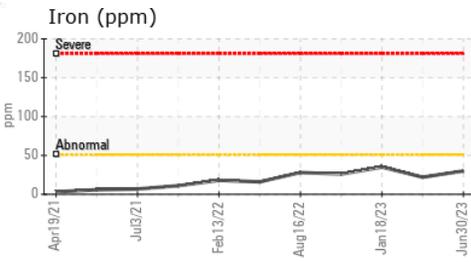
OIL ANALYSIS REPORT



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	>0.21	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.2	13.3	13.3	13.6

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0027696 **Received** : 19 Jul 2023
Lab Number : **05902749** **Diagnosed** : 20 Jul 2023
Unique Number : 10564105 **Diagnostician** : Wes Davis
Test Package : MOB1+

GFL Environmental - 467 - Arbor Hills LF
 10599 FIVE MILE RD
 NORTHVILLE, MI
 US 48168
 Contact: ANGELA RILEY
 angela.riley@gflenv.com
 T: (248)412-0697
 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)