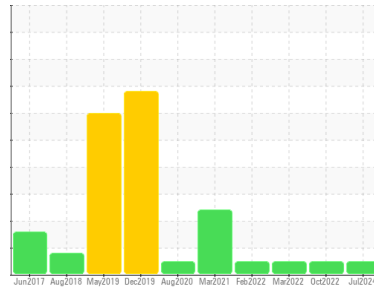




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
9145
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Please note that all wear metal and contaminant levels are being considered accumulative. Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes BN to determine the suitability of the oil for continued use.

Wear

An increase in the copper level is noted. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0125472	GFL0060171	GFL0048926
Sample Date	Client Info	02 Jul 2024	21 Oct 2022	30 Mar 2022
Machine Age	hrs	15059	155193	142655
Oil Age	hrs	1200	0	0
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		NORMAL	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >50	27	24	19
Chromium	ppm ASTM D5185(m) >5	1	2	2
Nickel	ppm ASTM D5185(m) >4	<1	<1	<1
Titanium	ppm ASTM D5185(m) >5	0	<1	0
Silver	ppm ASTM D5185(m) >3	<1	0	0
Aluminum	ppm ASTM D5185(m) >25	5	16	8
Lead	ppm ASTM D5185(m) >40	4	4	<1
Copper	ppm ASTM D5185(m) >150	76	6	9
Tin	ppm ASTM D5185(m) >4	0	<1	<1
Antimony	ppm ASTM D5185(m)	0	<1	<1
Vanadium	ppm ASTM D5185(m)	0	0	0
Beryllium	ppm ASTM D5185(m)	0	0	0
Cadmium	ppm ASTM D5185(m)	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 50	11	10	16
Barium	ppm ASTM D5185(m) 5	0	0	0
Molybdenum	ppm ASTM D5185(m) 50	118	54	52
Manganese	ppm ASTM D5185(m) 0	1	<1	<1
Magnesium	ppm ASTM D5185(m) 560	103	564	631
Calcium	ppm ASTM D5185(m) 1510	1725	1672	1524
Phosphorus	ppm ASTM D5185(m) 780	564	756	824
Zinc	ppm ASTM D5185(m) 870	691	879	936
Sulfur	ppm ASTM D5185(m) 2040	2058	2052	2072
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	3	7	6
Sodium	ppm ASTM D5185(m)	4	9	7
Potassium	ppm ASTM D5185(m) >20	1	<1	<1

INFRA-RED

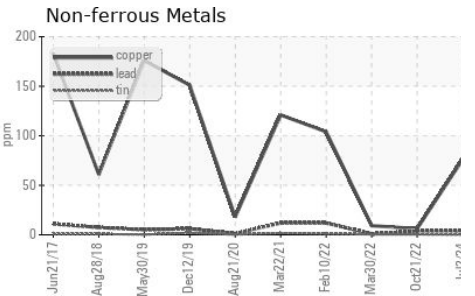
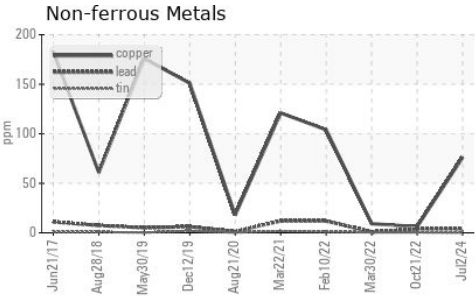
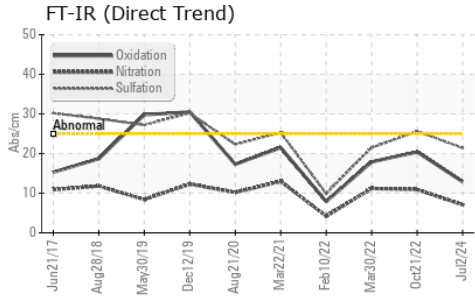
method	limit/base	current	history1	history2
Soot %	% ASTM D7844*	0	0	0
Nitration	Abs/cm ASTM D7624*	7.1	10.9	11.2
Sulfation	Abs/.1mm ASTM D7415*	21.4	25.6	21.5

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414*	12.9	20.4	17.9



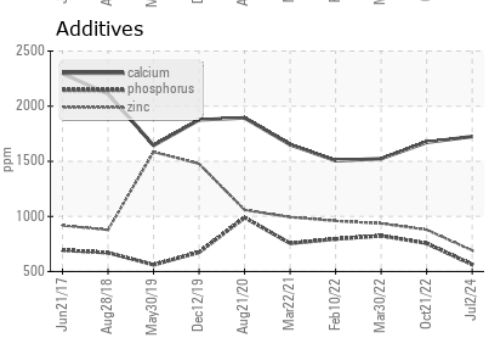
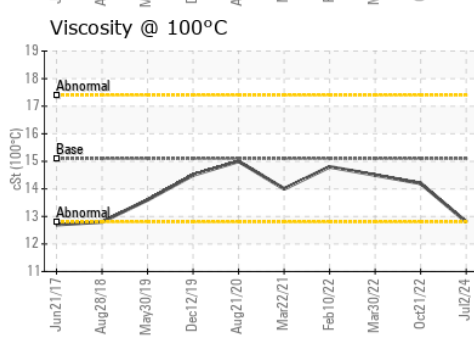
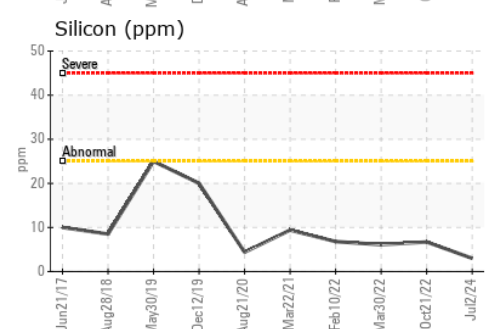
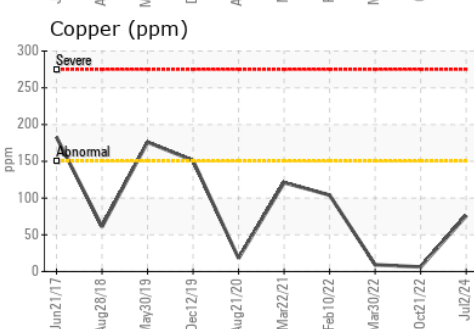
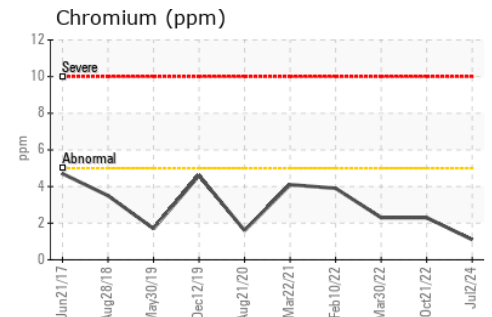
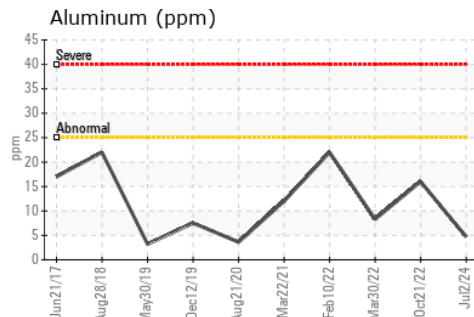
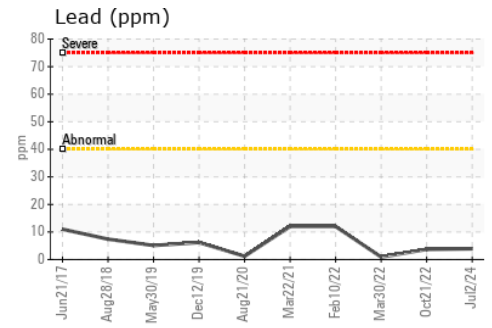
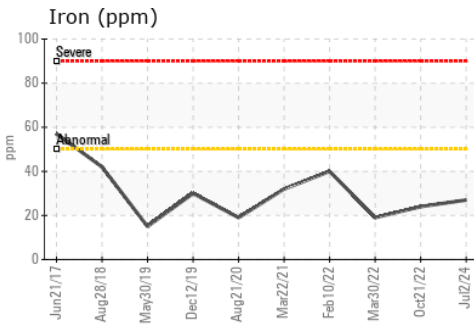
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	12.8	14.2

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0125472
Lab Number : 02645128
Unique Number : 5802667
Test Package : MOB 1
Received : 03 Jul 2024
Tested : 03 Jul 2024
Diagnosed : 03 Jul 2024 - Kevin Marson

GFL Environmental - 209 - Hamilton
 560 Seaman Street
 Stoney Creek, ON
 CA L8E 3X7
 Contact: Fred Carleton
 fred.carleton@gflenv.com
 T: (289)925-6693
 F: (905)664-9008

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.