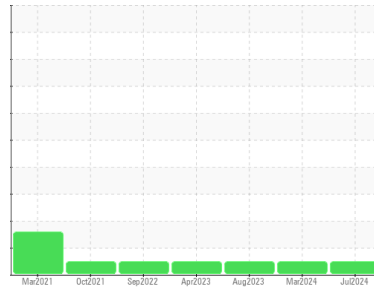




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

831004

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (--- LTR)

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	GFL	GFL0102672	GFL0090617	
Sample Date	Client Info	17 Jul 2024	15 Mar 2024	19 Aug 2023	
Machine Age	hrs	Client Info	7849	7113	6079
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A	
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	10	28	16
Chromium	ppm	ASTM D5185(m)	>4	<1	2	1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>9	2	3	2
Lead	ppm	ASTM D5185(m)	>30	<1	6	3
Copper	ppm	ASTM D5185(m)	>35	<1	2	2
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Antimony	ppm	ASTM D5185(m)		<1	0	0
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	7	9	6
Barium	ppm	ASTM D5185(m)	5	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	54	58	56
Manganese	ppm	ASTM D5185(m)	0	<1	0	1
Magnesium	ppm	ASTM D5185(m)	560	594	636	614
Calcium	ppm	ASTM D5185(m)	1510	1620	1819	1694
Phosphorus	ppm	ASTM D5185(m)	780	721	787	767
Zinc	ppm	ASTM D5185(m)	870	922	992	934
Sulfur	ppm	ASTM D5185(m)	2040	1970	1986	1974
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>+100	3	4	5
Sodium	ppm	ASTM D5185(m)		8	11	11
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*	>20	11.4	12.8	12.8
Sulfation	Abs.1mm	ASTM D7415*	>30	23.8	26.7	28.0

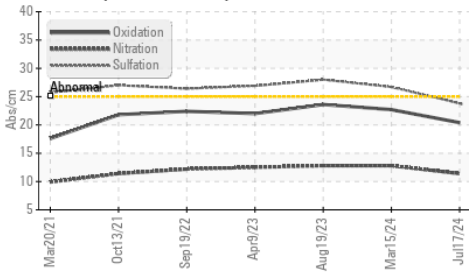
FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs.1mm	ASTM D7414*	>25	20.4	22.7	23.6

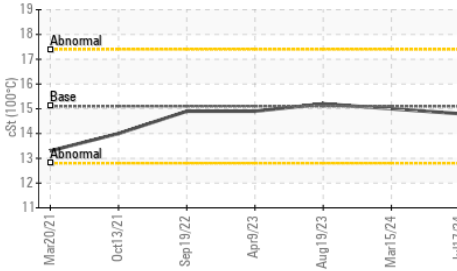


OIL ANALYSIS REPORT

FT-IR (Direct Trend)



Viscosity @ 100°C

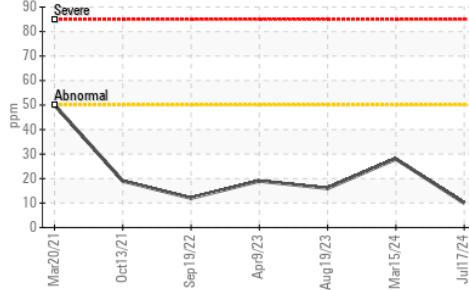


PARAMETER	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

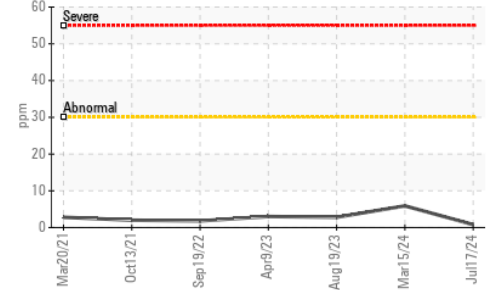
PARAMETER	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	14.8	15.0

GRAPHS

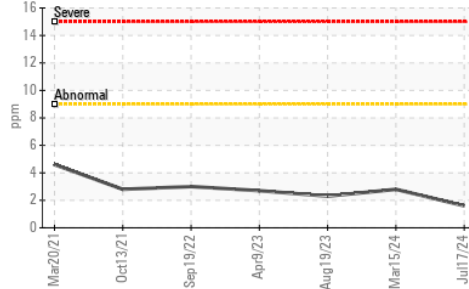
Iron (ppm)



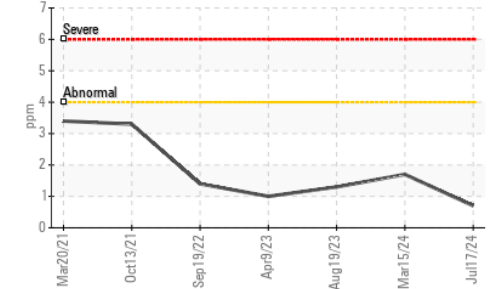
Lead (ppm)



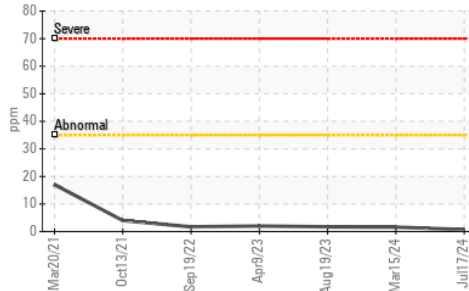
Aluminum (ppm)



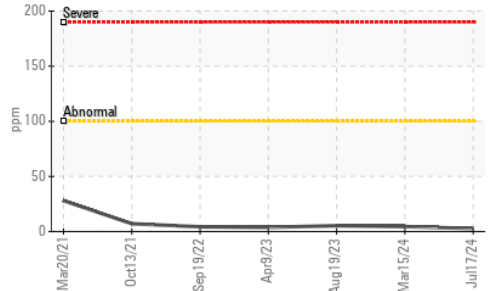
Chromium (ppm)



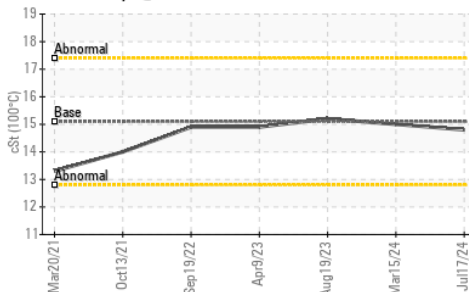
Copper (ppm)



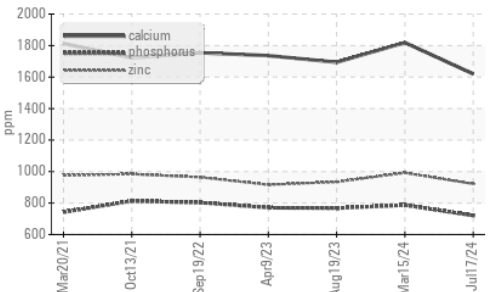
Silicon (ppm)



Viscosity @ 100°C



Additives



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL
Lab Number : 02648599
Unique Number : 5814151
Test Package : MOB 1

GFL Environmental - 554 - Edmonton SW
 8409 -15th Street NW
 Edmonton, AB
 CA T6P 0B8
 Contact: Tim Greig
 tgreig@gflenv.com
 T: (780)231-0521
 F:

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.