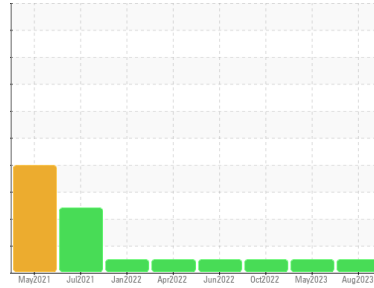




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
5593
Component
Diesel Engine
Fluid
PETRO CANADA DURON SAE 10W30 (40 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		GFL0085927	GFL0072817	GFL0059949
Sample Date	Client Info		15 Aug 2023	23 May 2023	14 Oct 2022
Machine Age	hrs	Client Info	27892	27331	0
Oil Age	hrs	Client Info	0	0	600
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	<1.0	<1.0

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >120	15	28	7
Chromium	ppm	ASTM D5185(m) >20	<1	<1	0
Nickel	ppm	ASTM D5185(m) >5	<1	<1	<1
Titanium	ppm	ASTM D5185(m) >2	0	0	0
Silver	ppm	ASTM D5185(m) >2	0	0	0
Aluminum	ppm	ASTM D5185(m) >20	2	2	2
Lead	ppm	ASTM D5185(m) >40	3	1	2
Copper	ppm	ASTM D5185(m) >330	3	3	2
Tin	ppm	ASTM D5185(m) >15	<1	<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) 1	2	1	2
Barium	ppm	ASTM D5185(m) 1	0	0	0
Molybdenum	ppm	ASTM D5185(m) 1	61	61	58
Manganese	ppm	ASTM D5185(m) 1	<1	<1	<1
Magnesium	ppm	ASTM D5185(m) 10	980	986	942
Calcium	ppm	ASTM D5185(m) 2942	1044	1097	1064
Phosphorus	ppm	ASTM D5185(m) 1102	1015	1051	1014
Zinc	ppm	ASTM D5185(m) 1351	1175	1190	1145
Sulfur	ppm	ASTM D5185(m) 3903	2341	2332	2376
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	6	6	5
Sodium	ppm	ASTM D5185(m)	20	10	10
Potassium	ppm	ASTM D5185(m) >20	15	6	5
Glycol	%	ASTM D7922*	0.0	NEG	NEG

INFRA-RED

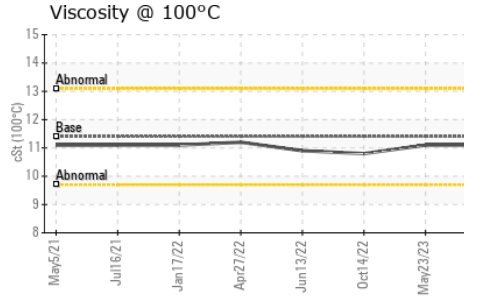
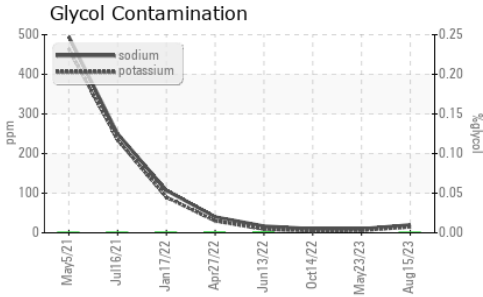
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	0.4	0.3	0
Nitration	Abs/cm	ASTM D7624* >20	8.9	8.4	7.9
Sulfation	Abs/.1mm	ASTM D7415* >30	22.4	20.4	20.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	17.7	17.0	17.0



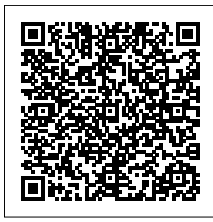
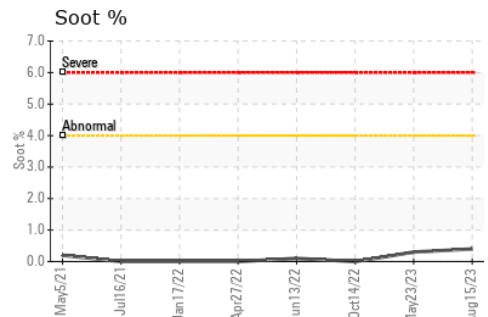
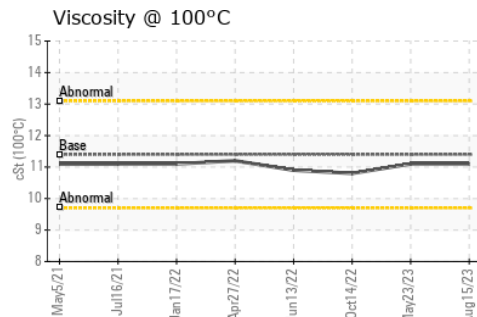
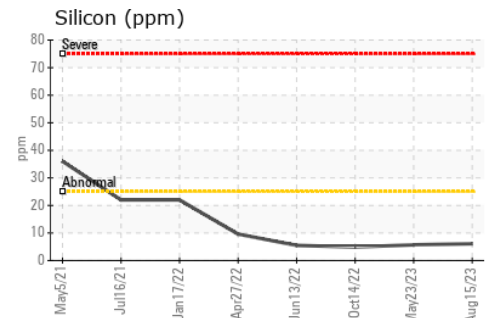
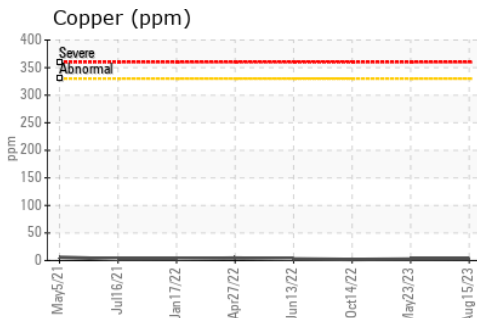
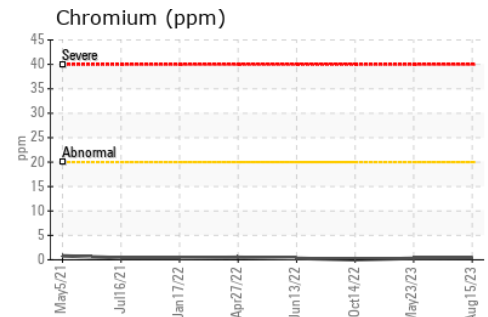
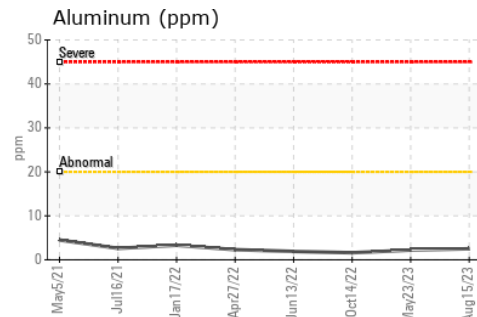
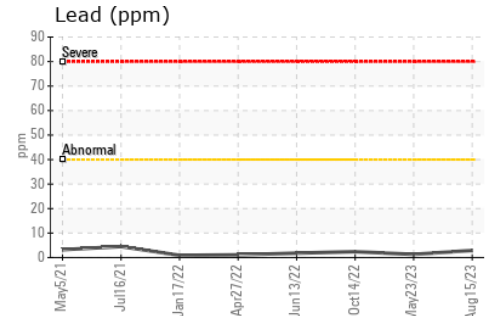
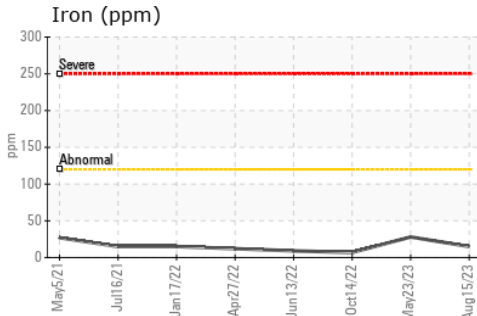
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
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 D7279(m)	11.4	11.1	10.8

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW
Sample No. : GFL0085927 **Received** : 31 Aug 2023
Lab Number : 02579571 **Diagnosed** : 31 Aug 2023
Unique Number : 5632631 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol)
 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.

Contact: Tim Greig
 tgreig@gflenv.com
 T:
 F: