



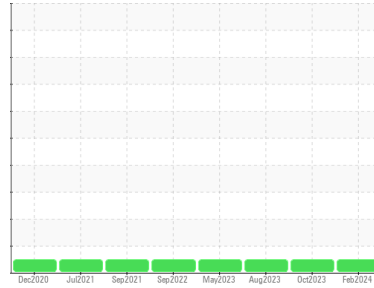
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
(.)
Machine Id
927065
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (35 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		GFL0111753	GFL0094183	GFL0091036
Sample Date	Client Info		12 Feb 2024	25 Oct 2023	08 Aug 2023
Machine Age	hrs	Client Info	77633	14050	14050
Oil Age	hrs	Client Info	0	0	0
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
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 D5185(m) >120	16	15	11
Chromium	ppm	ASTM D5185(m) >20	<1	0	<1
Nickel	ppm	ASTM D5185(m) >5	<1	0	<1
Titanium	ppm	ASTM D5185(m) >2	0	0	0
Silver	ppm	ASTM D5185(m) >2	0	<1	0
Aluminum	ppm	ASTM D5185(m) >20	4	2	3
Lead	ppm	ASTM D5185(m) >40	1	2	3
Copper	ppm	ASTM D5185(m) >330	3	1	1
Tin	ppm	ASTM D5185(m) >15	0	0	<1
Antimony	ppm	ASTM D5185(m)	0	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) 0	14	5	4
Barium	ppm	ASTM D5185(m) 0	0	<1	0
Molybdenum	ppm	ASTM D5185(m) 60	63	60	60
Manganese	ppm	ASTM D5185(m) 0	0	0	<1
Magnesium	ppm	ASTM D5185(m) 1010	928	943	990
Calcium	ppm	ASTM D5185(m) 1070	1111	1068	1043
Phosphorus	ppm	ASTM D5185(m) 1150	1022	935	1055
Zinc	ppm	ASTM D5185(m) 1270	1210	1170	1209
Sulfur	ppm	ASTM D5185(m) 2060	2666	2336	2397
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

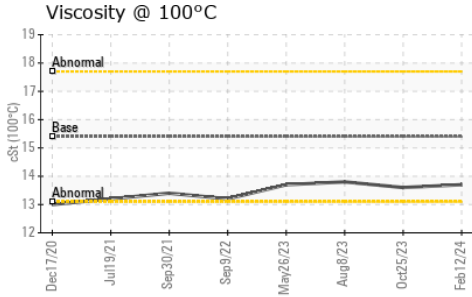
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	4	3	3
Sodium	ppm	ASTM D5185(m)	2	5	5
Potassium	ppm	ASTM D5185(m) >20	2	<1	2

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	0.5	0.7	0.6
Nitration	Abs/cm	ASTM D7624* >20	9.6	9.1	9.1
Sulfation	Abs./1mm	ASTM D7415* >30	21.2	21.1	22.3



OIL ANALYSIS REPORT

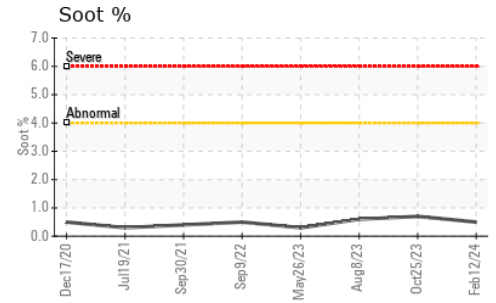
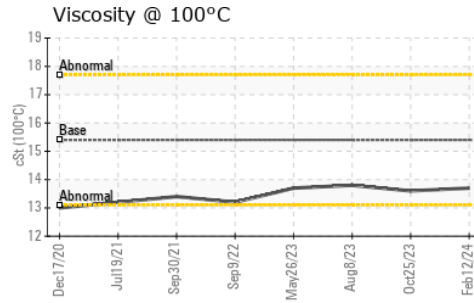
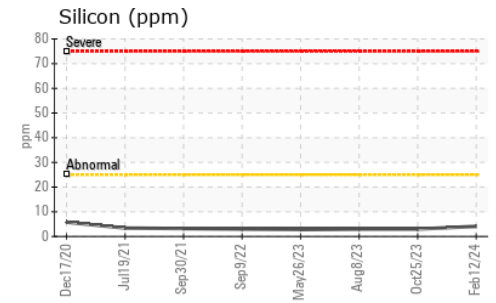
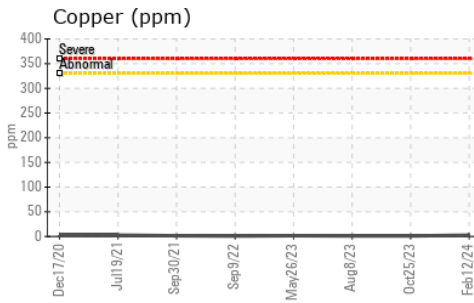
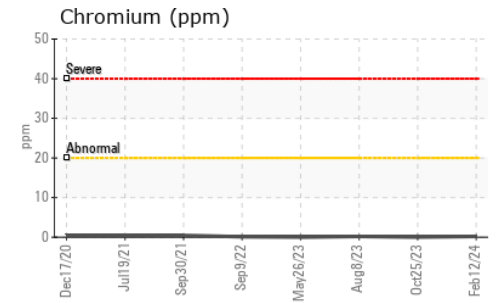
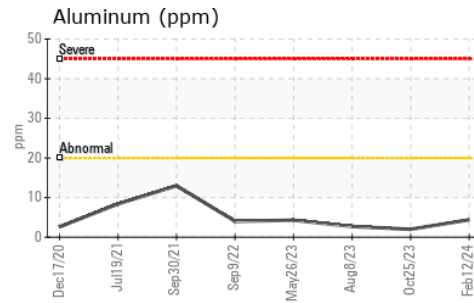
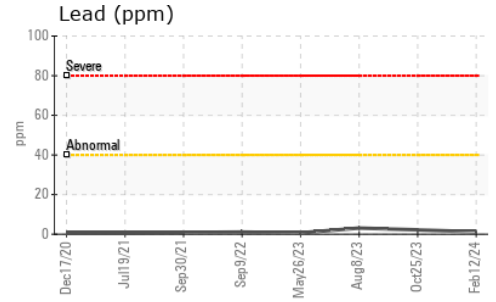
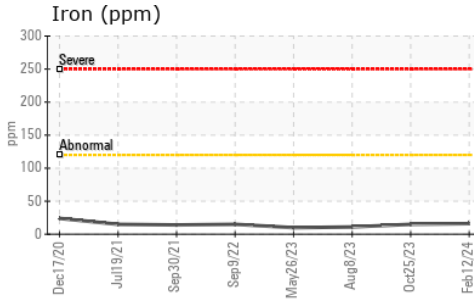


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	17.1	17.2	17.4

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.7	13.6	13.8

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0111753
Lab Number : 02615515
Unique Number : 5724610
Test Package : MOB 1
Received : 14 Feb 2024
Tested : 14 Feb 2024
Diagnosed : 14 Feb 2024 - Wes Davis

GFL Environmental - 217 - Aurora
 14131 BAYVIEW AVE, AURORA YARD
 AURORA, ON
 CA L4G 0K6
 Contact: Mike Havens
 MHavens@gflenv.com
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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.