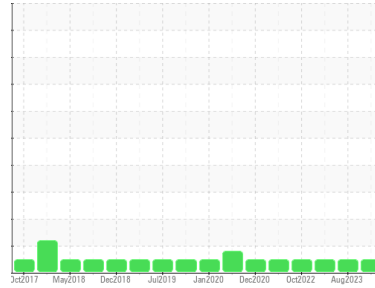




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
801030

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (25 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

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	GFL0094189	GFL0091034	GFL0068341
Sample Date	Client Info	26 Oct 2023	09 Aug 2023	23 Feb 2023
Machine Age	kms	Client Info	97145	97145
Oil Age	kms	Client Info	0	0
Oil Changed	Client Info	Changed	N/A	Changed
Sample Status		NORMAL	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	<1.0	<1.0
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >100	41	18	51
Chromium	ppm	ASTM D5185(m) >20	2	<1	2
Nickel	ppm	ASTM D5185(m) >4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	0	0	<1
Silver	ppm	ASTM D5185(m) >3	<1	0	0
Aluminum	ppm	ASTM D5185(m) >20	4	3	4
Lead	ppm	ASTM D5185(m) >40	<1	<1	<1
Copper	ppm	ASTM D5185(m) >330	1	<1	1
Tin	ppm	ASTM D5185(m) >15	0	0	<1
Antimony	ppm	ASTM D5185(m)	0	0	<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) 0	3	6	9
Barium	ppm	ASTM D5185(m) 0	<1	0	0
Molybdenum	ppm	ASTM D5185(m) 60	62	59	66
Manganese	ppm	ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	989	957	1033
Calcium	ppm	ASTM D5185(m) 1070	1100	1051	1209
Phosphorus	ppm	ASTM D5185(m) 1150	1019	1055	1145
Zinc	ppm	ASTM D5185(m) 1270	1230	1183	1290
Sulfur	ppm	ASTM D5185(m) 2060	2297	2485	2489
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >25	5	3	11
Sodium	ppm	ASTM D5185(m)	9	6	7
Potassium	ppm	ASTM D5185(m) >20	4	5	2

INFRA-RED

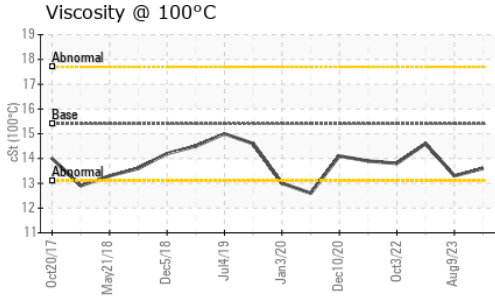
method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844* >3	0.9	0.2	0.2
Nitration	Abs/cm	ASTM D7624* >20	12.5	9.6	6.4
Sulfation	Abs/.1mm	ASTM D7415* >30	25.4	21.1	19.3

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414* >25	24.3	17.6	11.2



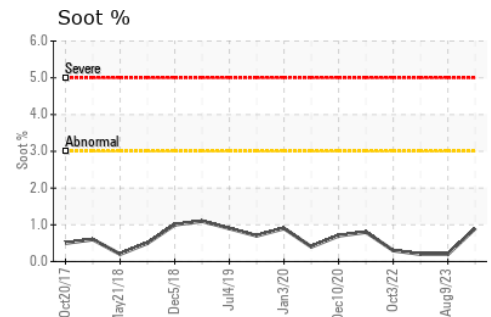
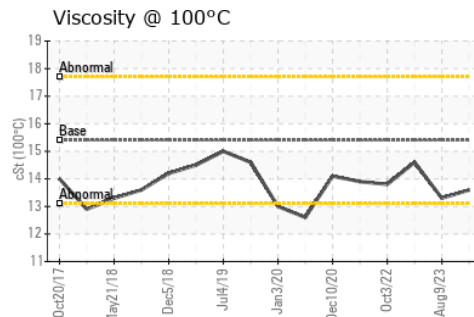
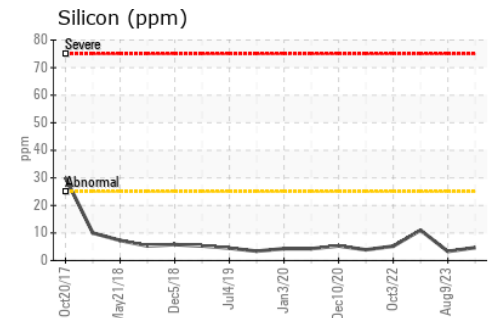
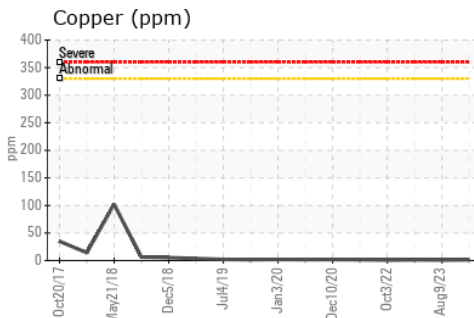
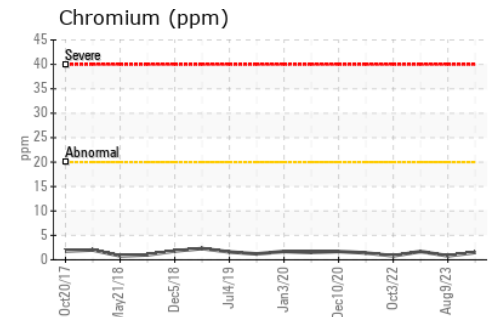
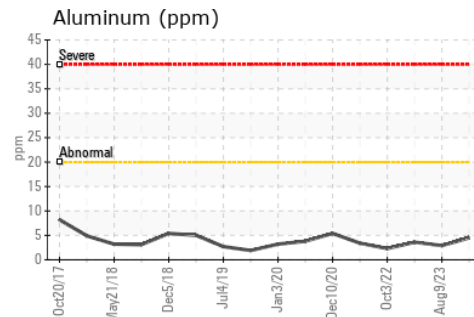
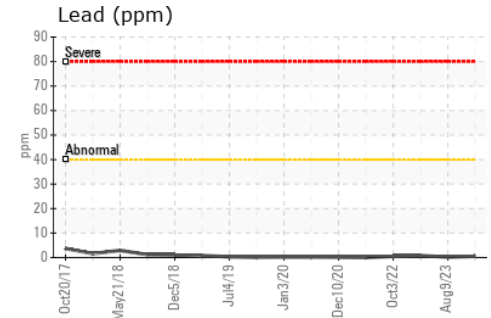
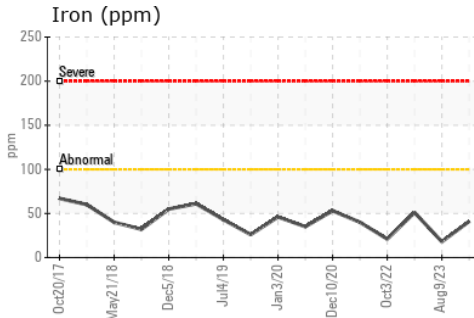
OIL ANALYSIS REPORT



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)	15.4	13.6	13.3	14.6

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0094189
Lab Number : 02592541
Unique Number : 5669620
Test Package : MOB 1

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

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.

T:
 F: (905)713-2445