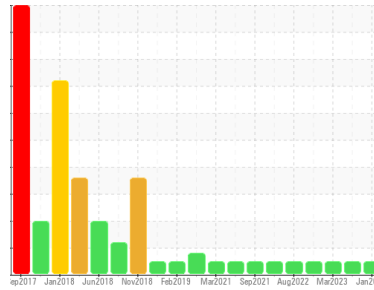




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
4585

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (--- 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		GFL0102640	GFL0090634	GFL0072863
Sample Date	Client Info		08 Jan 2024	06 Aug 2023	12 Mar 2023
Machine Age	hrs	Client Info	26701	26423	26122
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	N/A	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<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)	>110	24	38	45
Chromium	ppm	ASTM D5185(m)	>4	1	2	2
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	4	4	9
Lead	ppm	ASTM D5185(m)	>45	1	2	2
Copper	ppm	ASTM D5185(m)	>85	1	1	2
Tin	ppm	ASTM D5185(m)	>4	0	<1	<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)	2	2	4	4
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	59	59	62
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	948	971	980
Calcium	ppm	ASTM D5185(m)	1050	1052	1065	1133
Phosphorus	ppm	ASTM D5185(m)	995	988	1042	1080
Zinc	ppm	ASTM D5185(m)	1180	1168	1190	1206
Sulfur	ppm	ASTM D5185(m)	2600	2628	2467	2532
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

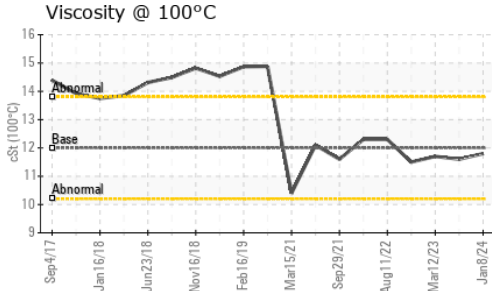
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>30	6	6	9
Sodium	ppm	ASTM D5185(m)		6	7	7
Potassium	ppm	ASTM D5185(m)	>20	4	4	13

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.9	1	1.2
Nitration	Abs/cm	ASTM D7624*	>20	8.7	9.7	11.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.3	22.0	24.8



OIL ANALYSIS REPORT

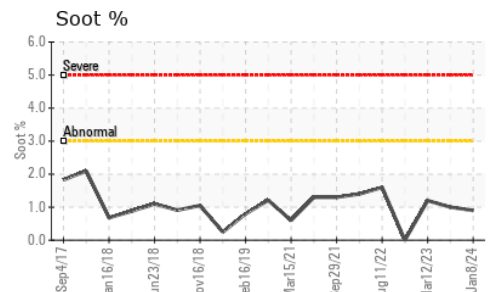
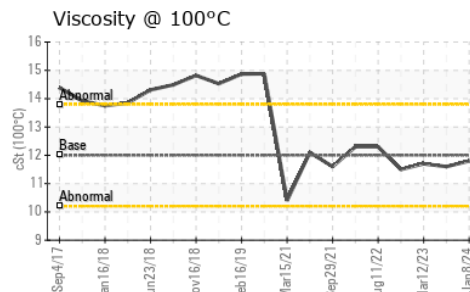
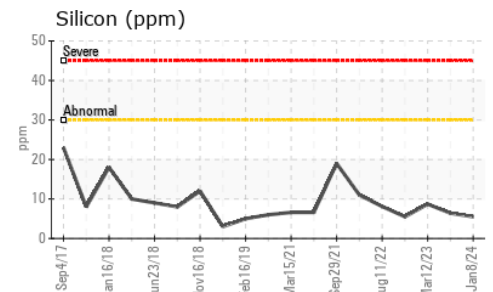
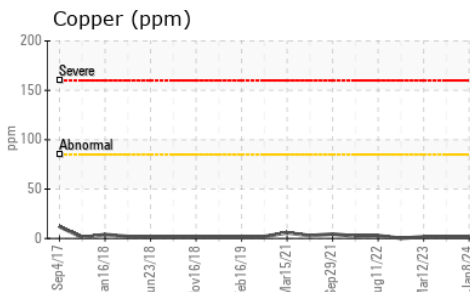
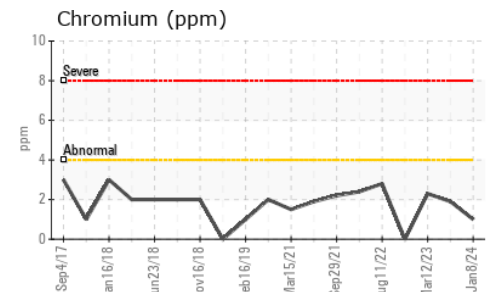
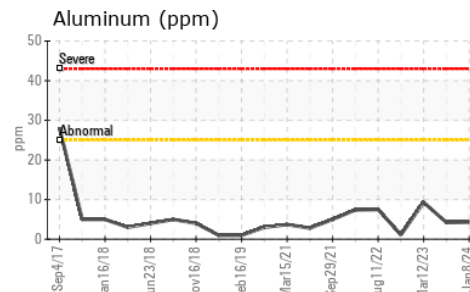
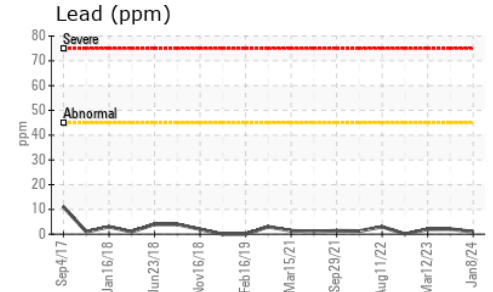
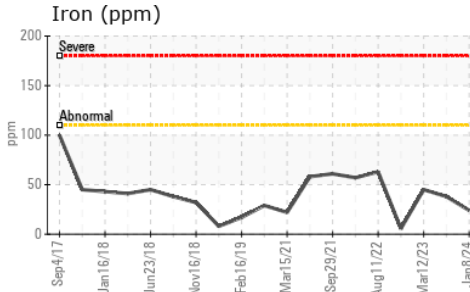


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	16.7	17.0	19.8

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)	12.00	11.8	11.6	11.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW
Sample No. : GFL0102640 **Received** : 22 Jan 2024
Lab Number : 02610192 **Diagnosed** : 22 Jan 2024
Unique Number : 5711278 **Diagnostician** : Wes Davis
Test Package : MOB 1

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: (780)231-0521
 F: