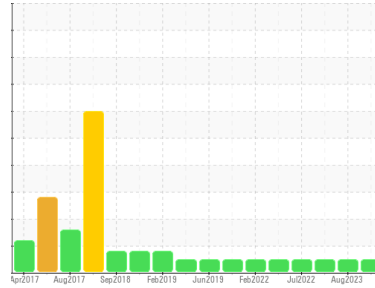




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
4531

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	GFL0102635	GFL0085804	GFL0072862	
Sample Date	Client Info	04 Jan 2024	03 Aug 2023	24 Feb 2023	
Machine Age	hrs	Client Info	23913	23814	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info	N/A	Changed	Changed	
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	0.0	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >110	4	20	31
Chromium	ppm ASTM D5185(m) >4	0	<1	1
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	2	4	3
Lead	ppm ASTM D5185(m) >45	<1	<1	<1
Copper	ppm ASTM D5185(m) >85	1	1	3
Tin	ppm ASTM D5185(m) >4	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) 2	2	2	2
Barium	ppm ASTM D5185(m) 0	0	0	0
Molybdenum	ppm ASTM D5185(m) 50	59	59	60
Manganese	ppm ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm ASTM D5185(m) 950	931	911	961
Calcium	ppm ASTM D5185(m) 1050	1001	970	1089
Phosphorus	ppm ASTM D5185(m) 995	991	1010	1060
Zinc	ppm ASTM D5185(m) 1180	1124	1112	1172
Sulfur	ppm ASTM D5185(m) 2600	2748	2465	2584
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

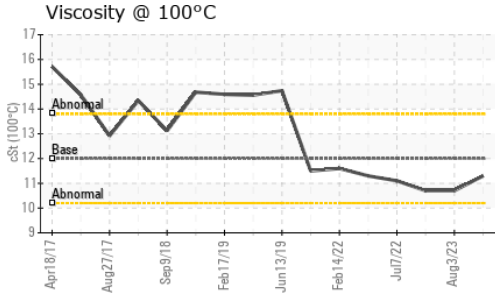
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >30	5	4	5
Sodium	ppm ASTM D5185(m)	68	85	20
Potassium	ppm ASTM D5185(m) >20	4	15	2

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	0	0.4	0.5
Nitration	Abs/cm ASTM D7624* >20	4.7	8.5	10.0
Sulfation	Abs/.1mm ASTM D7415* >30	18.0	22.4	22.8

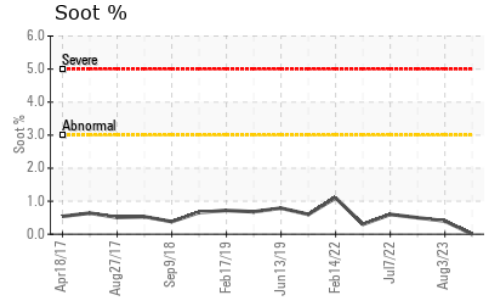
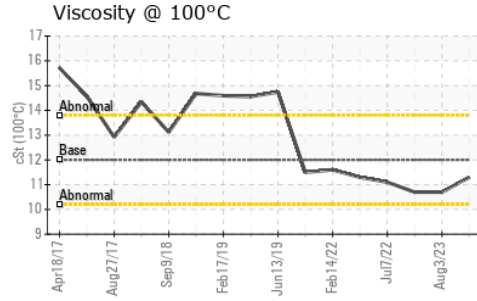
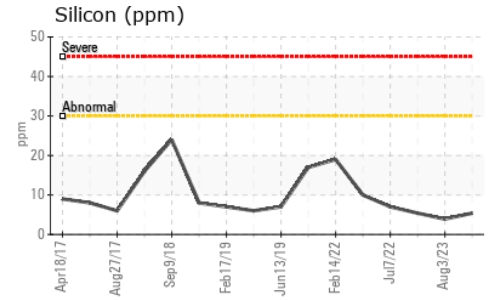
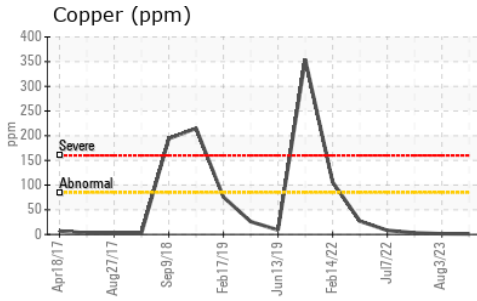
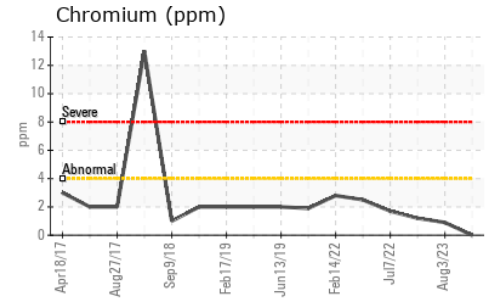
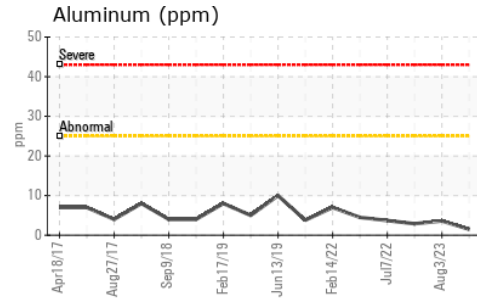
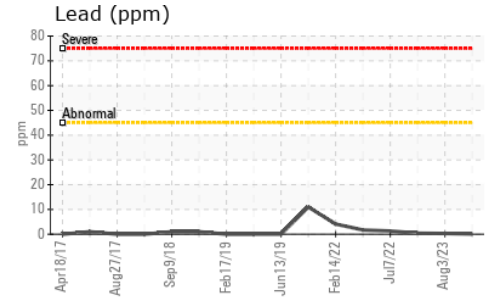
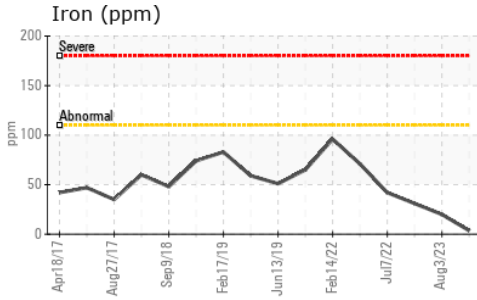


OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	13.2	19.1	18.1
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	11.3	10.7	10.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 554 - Edmonton SW**
Sample No. : GFL0102635 **Received** : 22 Jan 2024
Lab Number : **02610164** **Diagnosed** : 22 Jan 2024
Unique Number : 5711250 **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
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