



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
4516
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0102665	GFL0097637	GFL0090577
Sample Date		Client Info		02 Mar 2024	16 Nov 2023	30 Aug 2023
Machine Age	hrs	Client Info		12502	22176	11621
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	32	29	47
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	2	1	1
Lead	ppm	ASTM D5185(m)	>40	3	3	6
Copper	ppm	ASTM D5185(m)	>330	9	12	23
Tin	ppm	ASTM D5185(m)	>15	<1	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

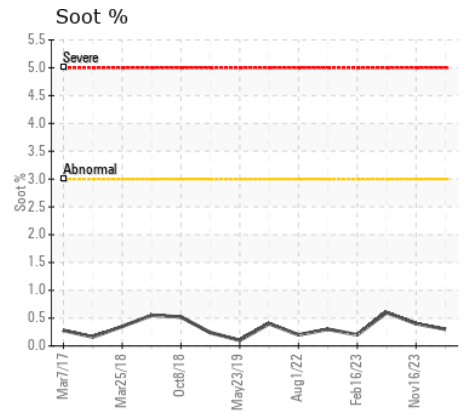
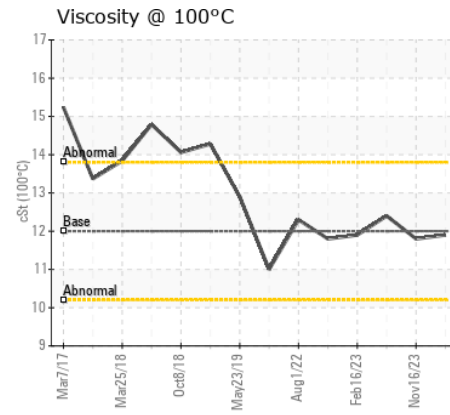
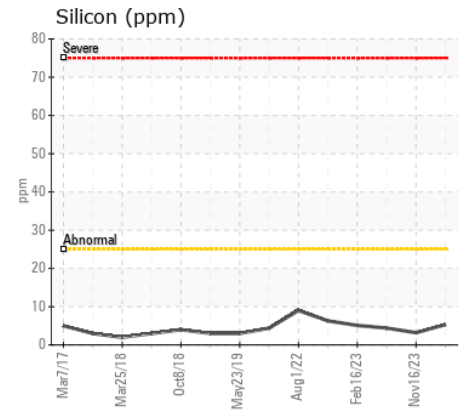
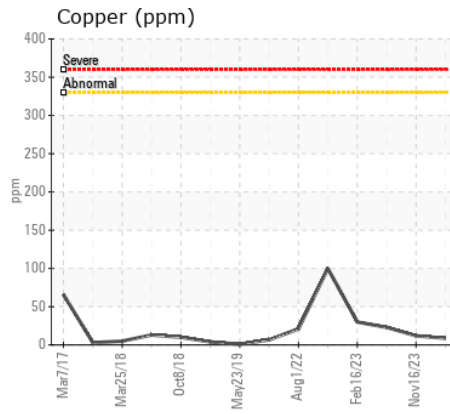
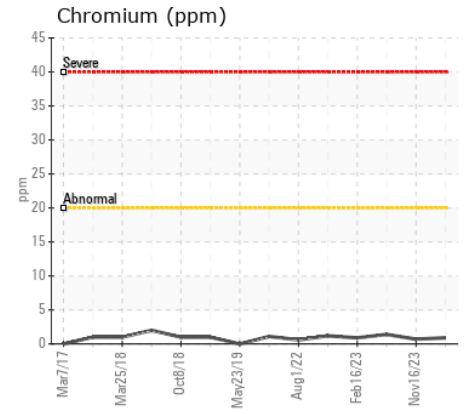
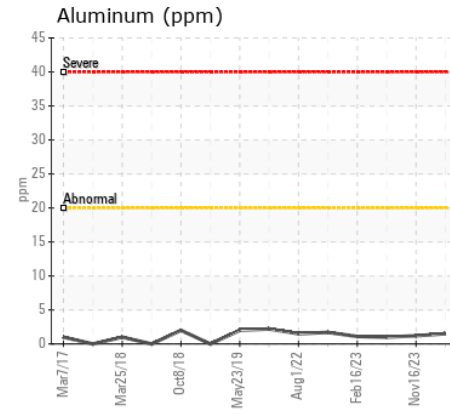
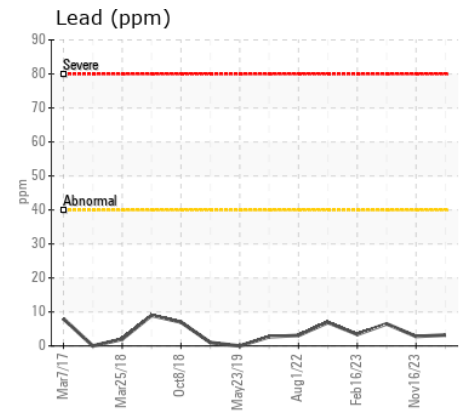
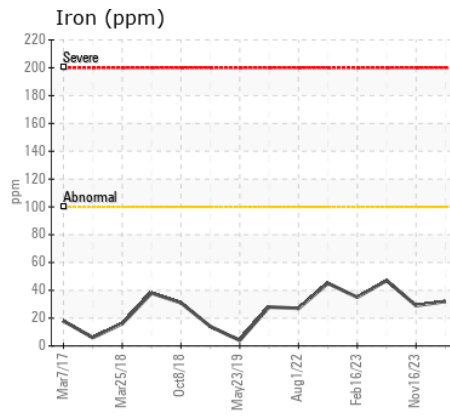
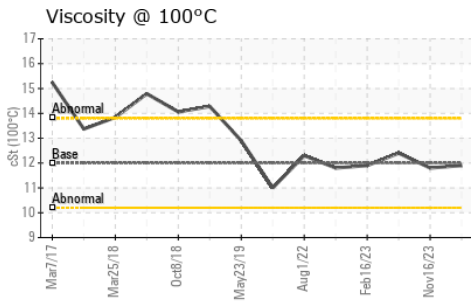
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	3	4
Potassium	ppm	ASTM D5185(m)	>20	1	0	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.3	0.4	0.6
Nitration	Abs/cm	ASTM D7624*	>20	9.6	9.2	10.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.6	22.9	26.4
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		3	3	4
Boron	ppm	ASTM D5185(m)	2	7	4	7
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	61	61	61
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	950	981	987	969
Calcium	ppm	ASTM D5185(m)	1050	1092	1079	1122
Phosphorus	ppm	ASTM D5185(m)	995	1018	1020	1017
Zinc	ppm	ASTM D5185(m)	1180	1218	1221	1215
Sulfur	ppm	ASTM D5185(m)	2600	2684	2537	2353
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.1	20.2	23.0
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.9	11.8	12.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0102665
Lab Number : 02620085
Unique Number : 5737195
Test Package : MOB 1
Received : 06 Mar 2024
Tested : 06 Mar 2024
Diagnosed : 06 Mar 2024 - Wes Davis

GFL Environmental - 554 - Edmonton SW
 8409 - 15th Street NW
 Edmonton, AB
 CA T6P 0B8
 Contact: Tim Greig
 tgreig@gflenv.com
 T: (780)231-0521
 F:

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.