



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
8409
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0112510	GFL0112547	GFL0093889
Sample Date		Client Info		15 May 2024	25 Mar 2024	15 Oct 2023
Machine Age	hrs	Client Info		15403	15168	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	13	24	28
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>30	3	5	3
Lead	ppm	ASTM D5185(m)	>30	0	0	<1
Copper	ppm	ASTM D5185(m)	>150	<1	1	2
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

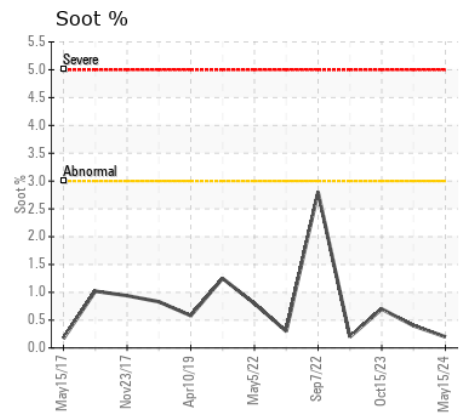
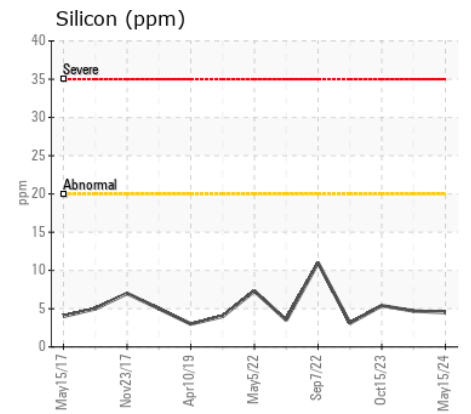
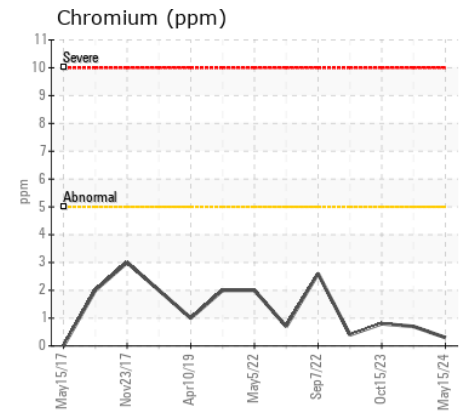
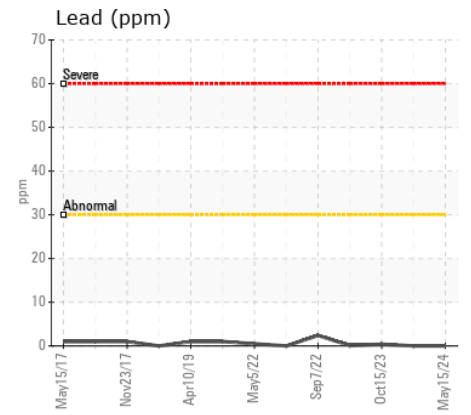
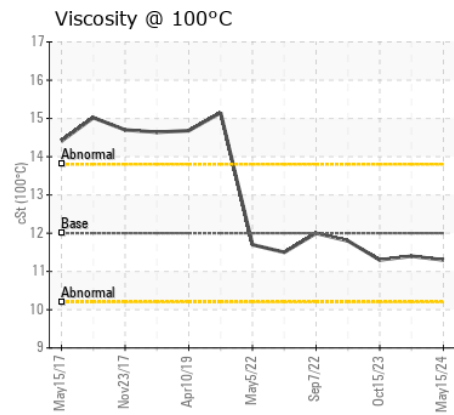
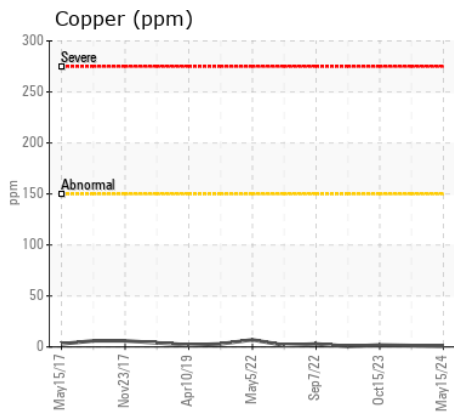
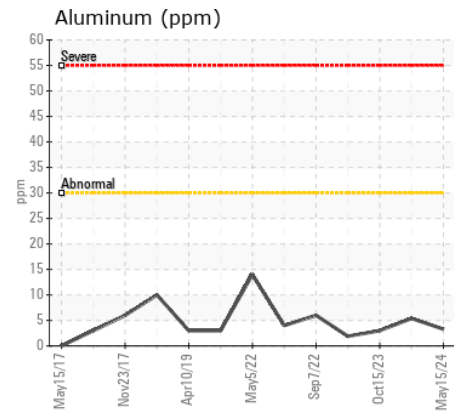
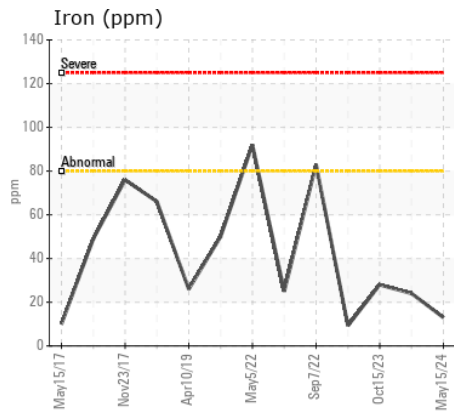
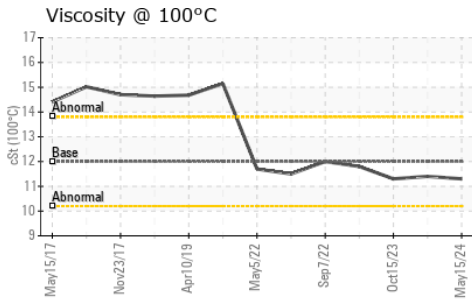
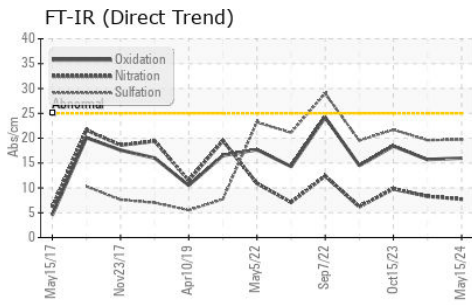
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	4	5	5
Potassium	ppm	ASTM D5185(m)	>20	3	1	0
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	0.2	0.4	0.7
Nitration	Abs/cm	ASTM D7624*	>20	7.7	8.3	9.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.7	19.6	21.7
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)		4	5	7
Boron	ppm	ASTM D5185(m)	2	3	4	8
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	50	56	58	62
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	950	918	938	948
Calcium	ppm	ASTM D5185(m)	1050	1001	1043	1093
Phosphorus	ppm	ASTM D5185(m)	995	922	957	985
Zinc	ppm	ASTM D5185(m)	1180	1119	1154	1191
Sulfur	ppm	ASTM D5185(m)	2600	2363	2388	2394
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.0	15.7	18.4
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.3	11.4	11.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112510
Lab Number : 02637104
Unique Number : 5786266
Test Package : MOB 1

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.