



WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
GFL207
Machine Id
800020
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (21 LTR)

RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0118500	GFL0102737	GFL0094555
Sample Date		Client Info		30 Apr 2024	20 Feb 2024	08 Dec 2023
Machine Age	hrs	Client Info		18269	17676	17102
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				SEVERE	SEVERE	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>75	35	35	31
Chromium	ppm	ASTM D5185(m)	>5	2	2	1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>15	2	3	2
Lead	ppm	ASTM D5185(m)	>25	0	0	<1
Copper	ppm	ASTM D5185(m)	>100	1	1	1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

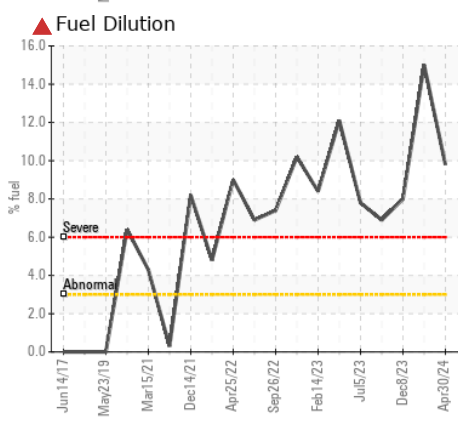
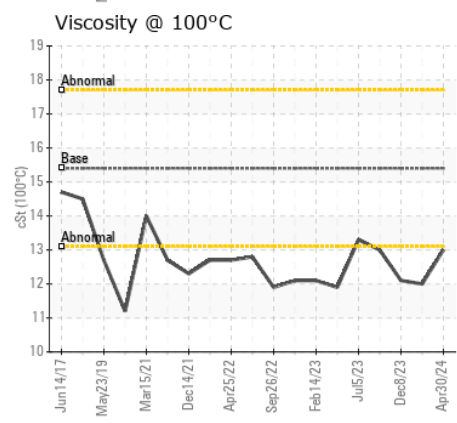
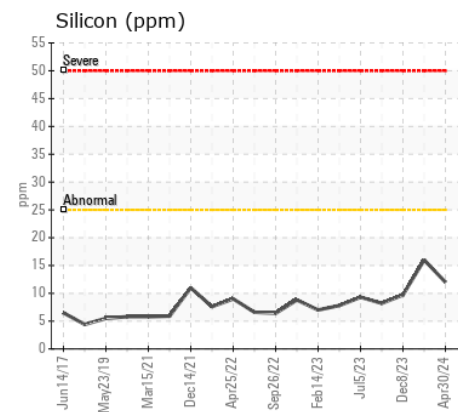
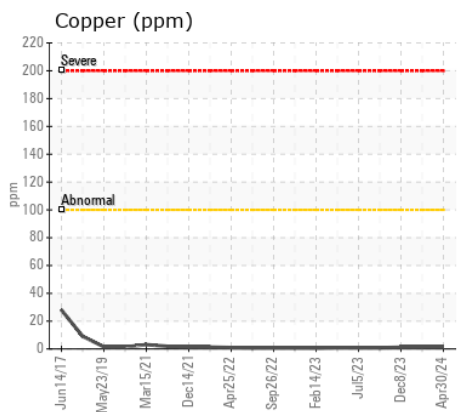
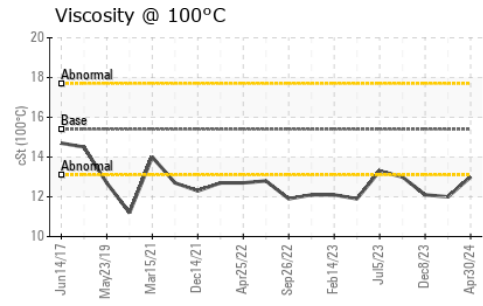
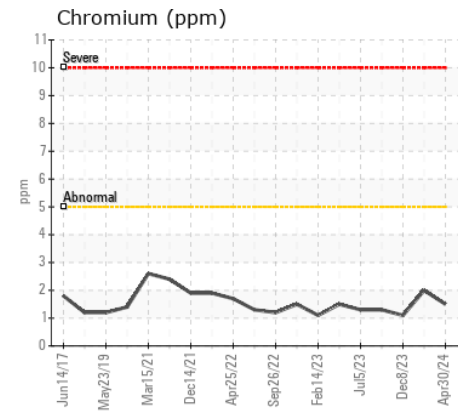
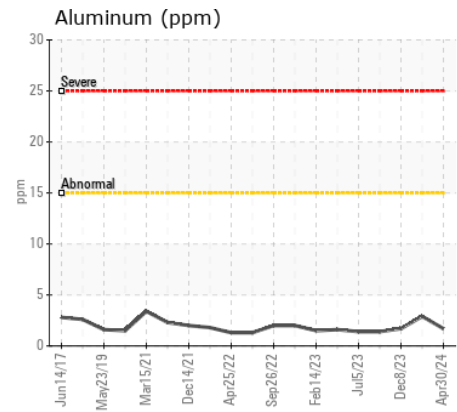
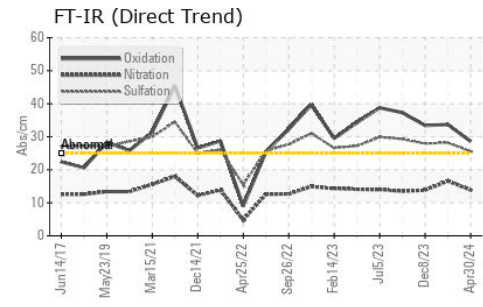
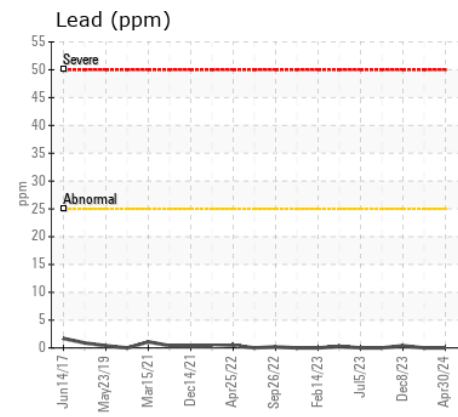
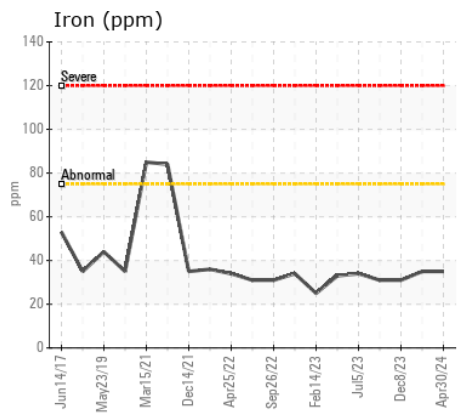
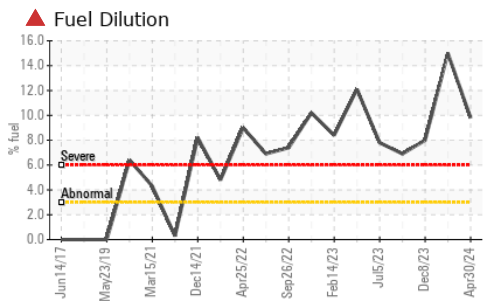
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	12	16	10
Potassium	ppm	ASTM D5185(m)	>20	2	2	1
Fuel	%	ASTM D7593*	>3.0	▲ 9.8	▲ 15	▲ 8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.8	0.9	0.9
Nitration	Abs/cm	ASTM D7624*	>20	13.9	16.6	13.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.6	28.2	27.9
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		36	12	8
Boron	ppm	ASTM D5185(m)	0	2	2	2
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	54	46	49
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	1010	813	730	800
Calcium	ppm	ASTM D5185(m)	1070	866	806	895
Phosphorus	ppm	ASTM D5185(m)	1150	830	767	835
Zinc	ppm	ASTM D5185(m)	1270	991	899	1002
Sulfur	ppm	ASTM D5185(m)	2060	1991	1957	2050
Oxidation	Abs/.1mm	ASTM D7414*	>25	28.6	33.7	33.4
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.0	▲ 12.0	▲ 12.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0118500 **Received** : 02 May 2024
Lab Number : 02632723 **Tested** : 03 May 2024
Unique Number : 5773876 **Diagnosed** : 03 May 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: PercentFuel)

GFL Environmental - 227 - Pickering MTCE
 1034 Toy Ave
 Pickering, ON
 CA L1W 3P1
 Contact: Maintenance

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: