



Machine Id
7112
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (22 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0122314	GFL0107122	WC0875100
Sample Date		Client Info		14 May 2024	19 Jan 2024	27 Nov 2023
Machine Age	hrs	Client Info		13436	12479	12336
Oil Age	hrs	Client Info		600	0	220
Filter Age	hrs	Client Info		600	0	220
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>75	29	40	45
Chromium	ppm	ASTM D5185(m)	>5	<1	1	2
Nickel	ppm	ASTM D5185(m)	>4	<1	<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	9	10	7
Lead	ppm	ASTM D5185(m)	>25	0	<1	<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

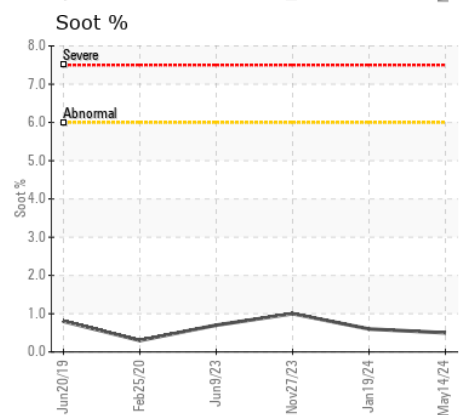
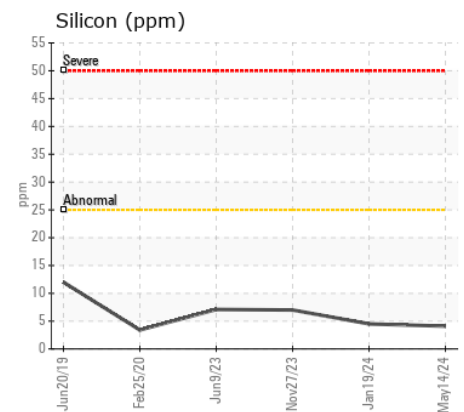
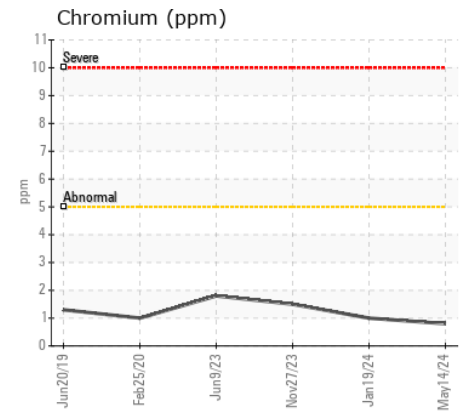
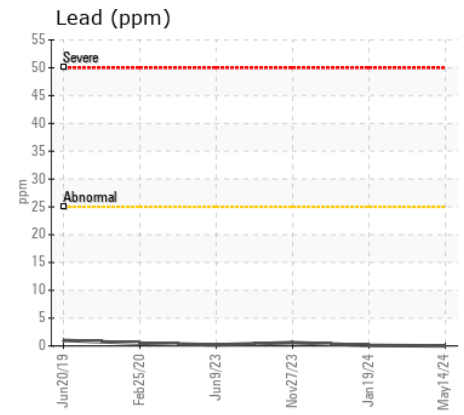
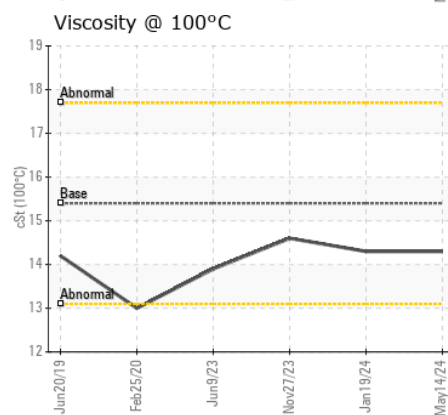
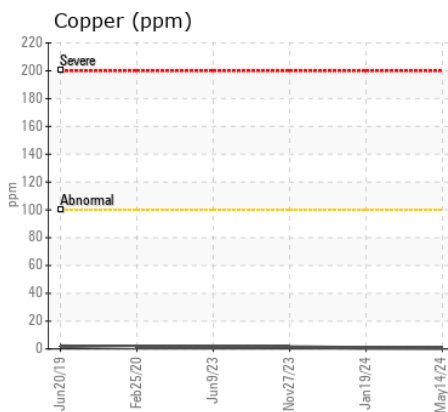
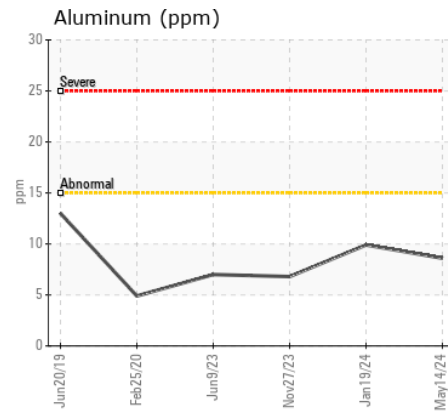
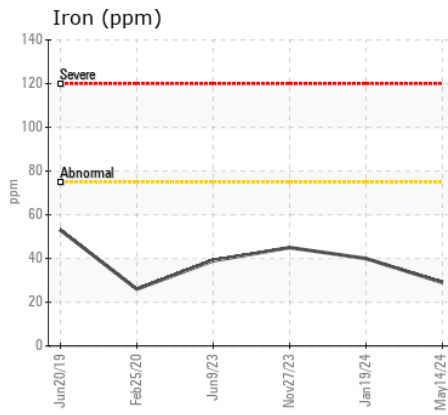
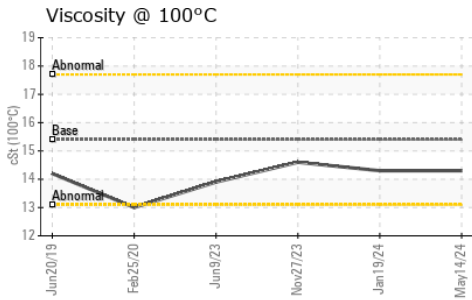
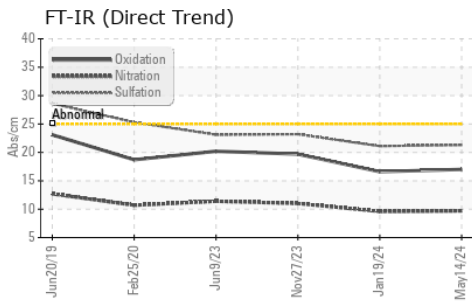
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	4	7
Potassium	ppm	ASTM D5185(m)	>20	13	13	9
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.5	0.6	1
Nitration	Abs/cm	ASTM D7624*	>20	9.7	9.6	11.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.3	21.1	23.2
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)		5	5	5
Boron	ppm	ASTM D5185(m)	0	19	16	4
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	63	60	60
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	1010	928	925	962
Calcium	ppm	ASTM D5185(m)	1070	1073	1059	1089
Phosphorus	ppm	ASTM D5185(m)	1150	1022	1013	1003
Zinc	ppm	ASTM D5185(m)	1270	1211	1177	1234
Sulfur	ppm	ASTM D5185(m)	2060	2486	2648	2387
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.0	16.6	19.7
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.3	14.3	14.6



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0122314
Lab Number : 02636250
Unique Number : 5785412
Test Package : MOB 1
Received : 17 May 2024
Tested : 17 May 2024
Diagnosed : 17 May 2024 - Wes Davis

GFL Environmental - 217 - Aurora
 14131 BAYVIEW AVE, AURORA YARD
 AURORA, ON
 CA L4G 0K6
 Contact: Mike Havens
 MHavens@gflenv.com

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:
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