



Machine Id
511003
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		GFL0115574	GFL0084219	GFL0072244
Sample Date		Client Info		17 May 2024	01 Aug 2023	08 Mar 2023
Machine Age	kms	Client Info		415051	369731	317675
Oil Age	kms	Client Info		45320	52056	0
Filter Age	kms	Client Info		45320	52056	0
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)	>120	35	30	49
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	2
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	3	3	9
Lead	ppm	ASTM D5185(m)	>40	1	2	4
Copper	ppm	ASTM D5185(m)	>330	18	7	13
Tin	ppm	ASTM D5185(m)	>15	<1	1	2
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

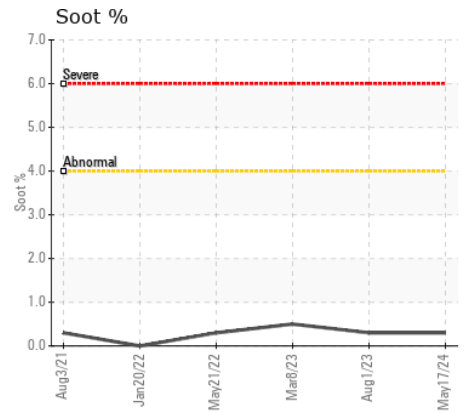
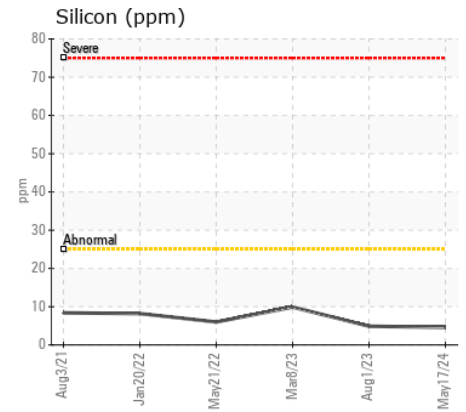
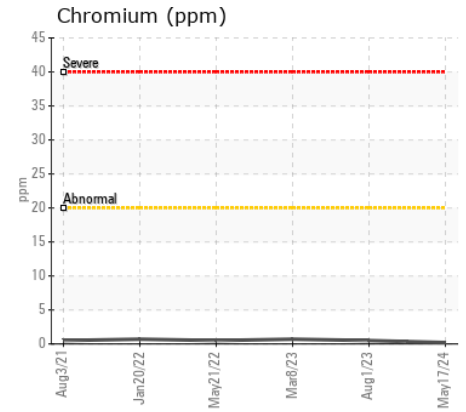
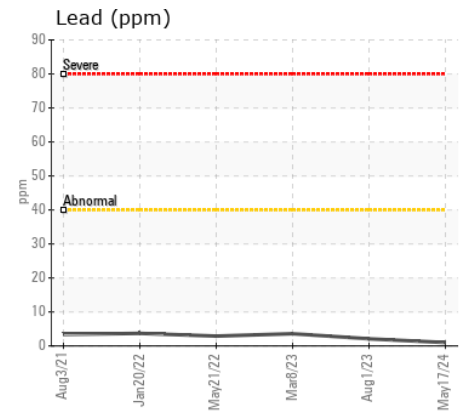
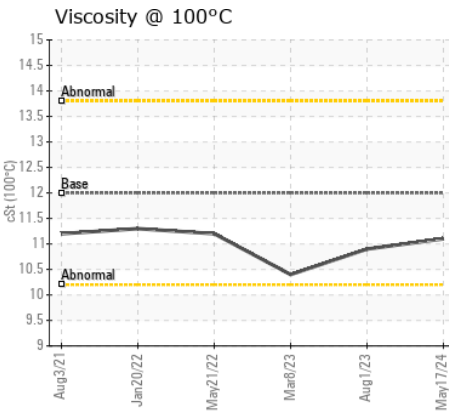
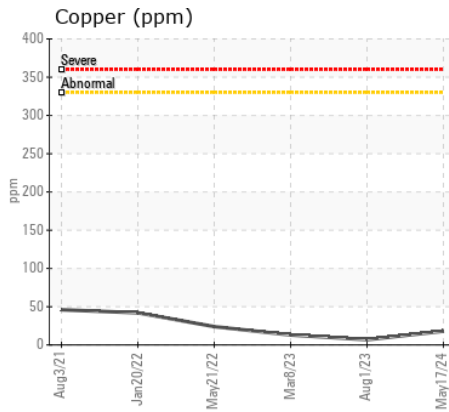
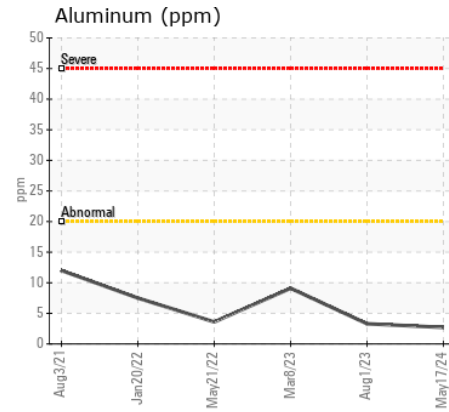
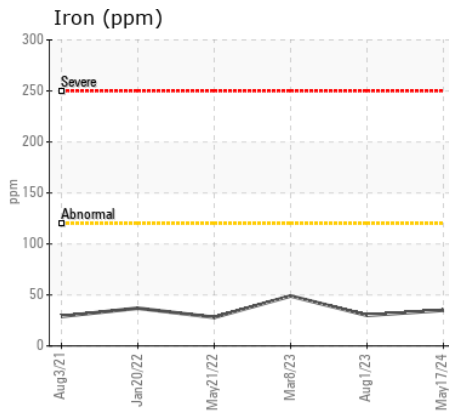
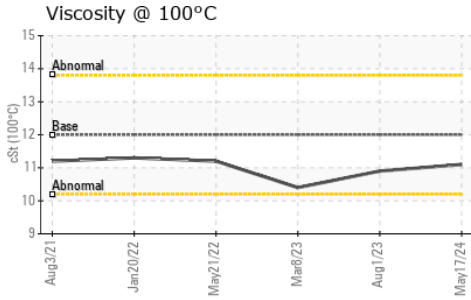
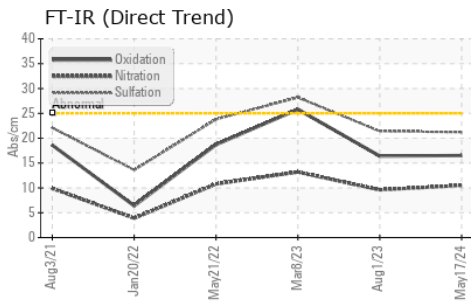
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	5	10
Potassium	ppm	ASTM D5185(m)	>20	3	3	10
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*	>4	0.3	0.3	0.5
Nitration	Abs/cm	ASTM D7624*	>20	10.5	9.6	13.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.2	21.4	28.2
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)		2	2	3
Boron	ppm	ASTM D5185(m)	2	4	2	13
Barium	ppm	ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	50	63	66	115
Manganese	ppm	ASTM D5185(m)	0	1	<1	1
Magnesium	ppm	ASTM D5185(m)	950	955	950	846
Calcium	ppm	ASTM D5185(m)	1050	1114	1116	1538
Phosphorus	ppm	ASTM D5185(m)	995	954	979	840
Zinc	ppm	ASTM D5185(m)	1180	1199	1163	951
Sulfur	ppm	ASTM D5185(m)	2600	2393	2275	2185
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.5	16.4	25.8
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.1	10.9	10.4



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0115574
Lab Number : 02636865
Unique Number : 5786027
Test Package : MOB 1
Received : 22 May 2024
Tested : 22 May 2024
Diagnosed : 22 May 2024 - Wes Davis

GFL Environmental - 245 - BJ Bear
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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.