

Area
[1284364]
Machine Id
524004
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0118535	GFL0066482	GFL0043741
Sample Date		Client Info		29 May 2024	06 Jan 2023	10 Mar 2022
Machine Age	hrs	Client Info		17771	16649	95727
Oil Age	hrs	Client Info		0	0	95727
Filter Age	hrs	Client Info		0	0	95727
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	20	20	28
Chromium	ppm	ASTM D5185(m)	>20	<1	1	1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	8	7	9
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	5	6	10
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

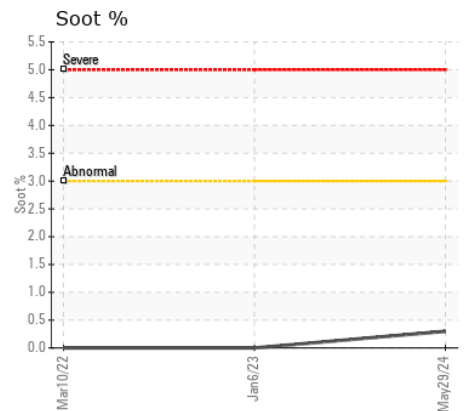
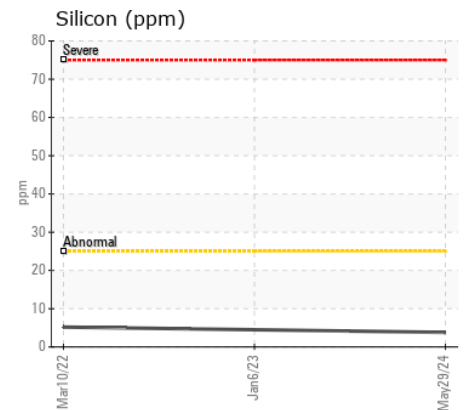
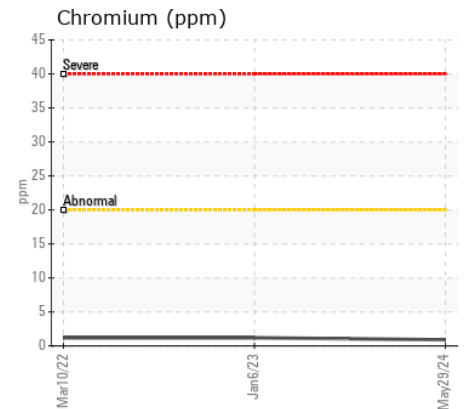
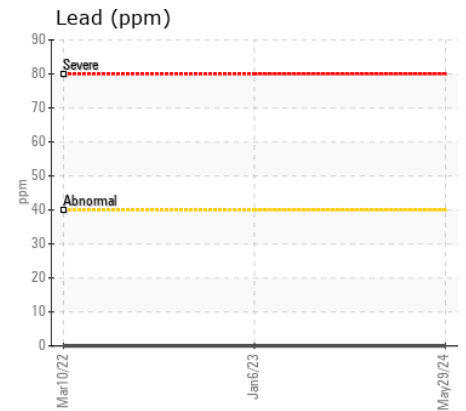
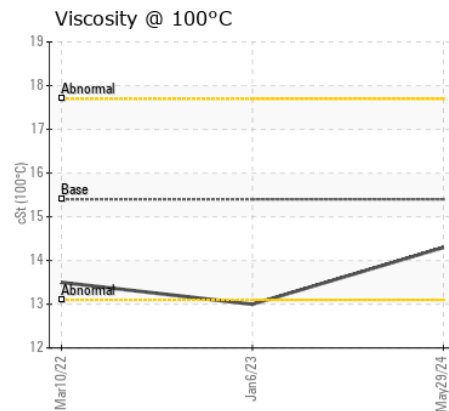
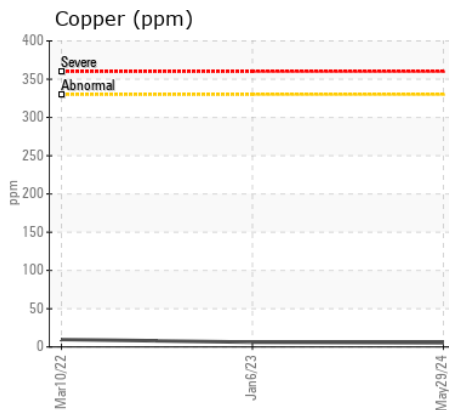
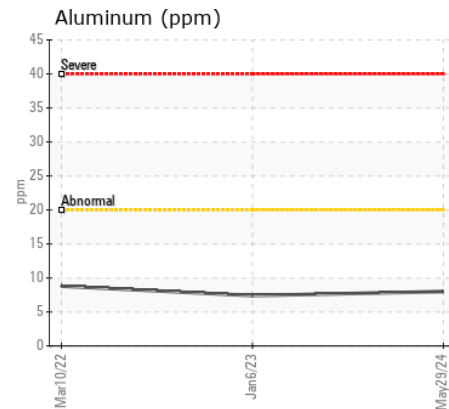
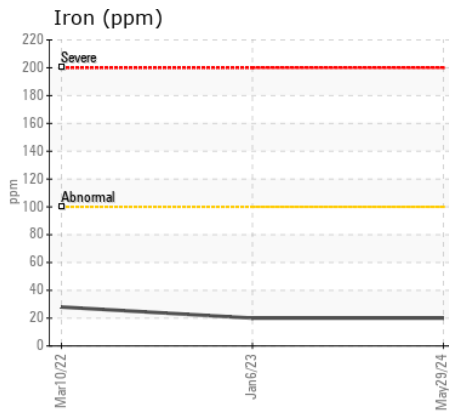
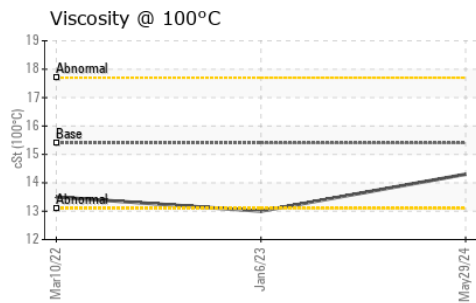
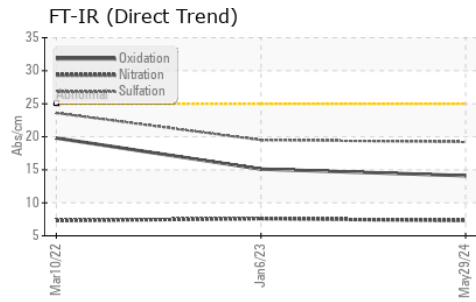
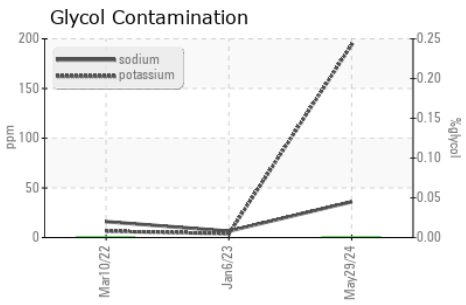
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	4	5
Potassium	ppm	ASTM D5185(m)	>20	194	4	6
Fuel		WC Method	>5	<1.0	0.5	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	NEG	0.0
Soot %	%	ASTM D7844*	>3	0.3	0	0
Nitration	Abs/cm	ASTM D7624*	>20	7.3	7.6	7.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.2	19.5	23.6
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)		36	6	16
Boron	ppm	ASTM D5185(m)	0	3	11	40
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	69	55	42
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	947	867	554
Calcium	ppm	ASTM D5185(m)	1070	1091	1302	1512
Phosphorus	ppm	ASTM D5185(m)	1150	1009	1016	811
Zinc	ppm	ASTM D5185(m)	1270	1173	1156	890
Sulfur	ppm	ASTM D5185(m)	2060	2540	2602	2090
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.1	15.1	19.8
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.3	13.0	13.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0118535 **Received** : 30 May 2024
Lab Number : 02638785 **Tested** : 31 May 2024
Unique Number : 5787947 **Diagnosed** : 31 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol)

GFL Environmental - 207 - Pickering SW
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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.