



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
511016
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		GFL0120105	GFL0067046	GFL0034014
Sample Date		Client Info		14 Jun 2024	02 Dec 2022	25 Nov 2021
Machine Age	kms	Client Info		400343	223813	124010
Oil Age	kms	Client Info		0	0	55658
Filter Age	kms	Client Info		0	0	55658
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	71	31	35
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<1	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	4	4	6
Lead	ppm	ASTM D5185(m)	>40	2	2	4
Copper	ppm	ASTM D5185(m)	>330	17	18	51
Tin	ppm	ASTM D5185(m)	>15	1	2	3
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

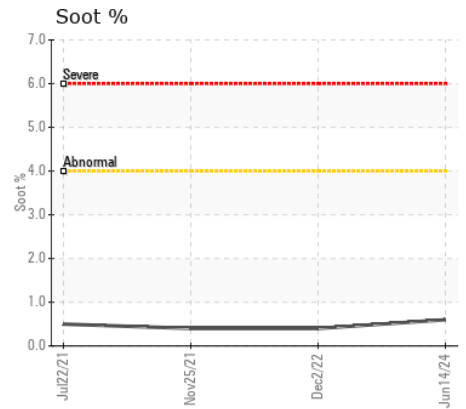
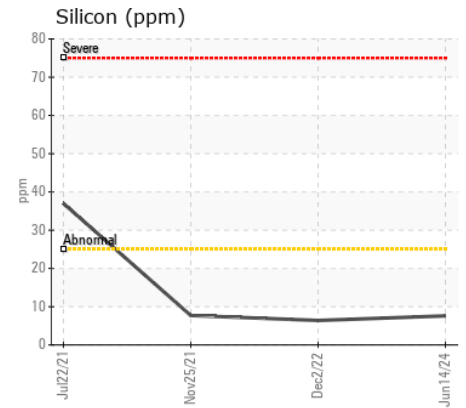
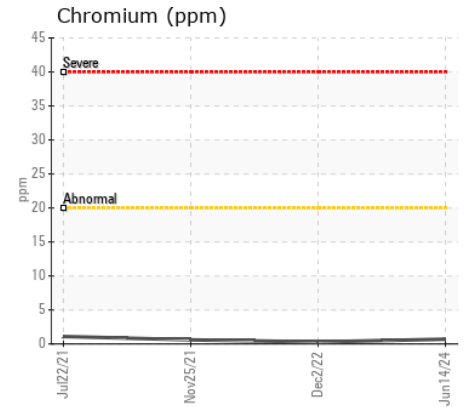
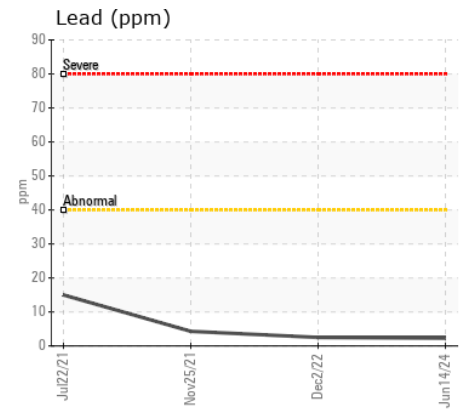
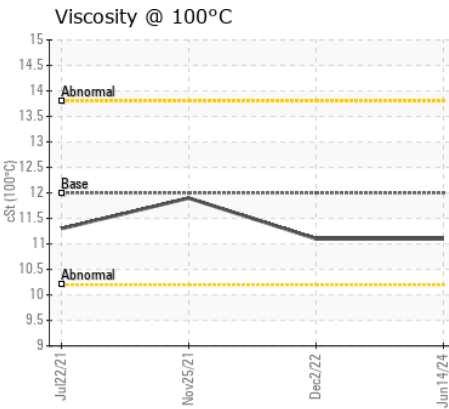
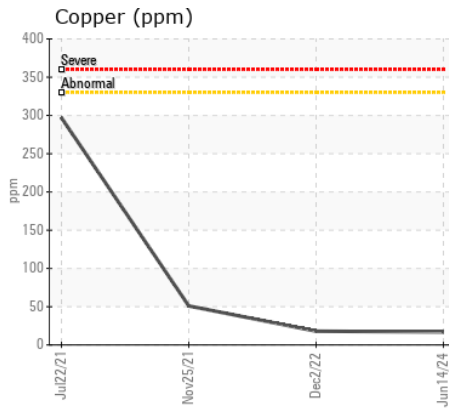
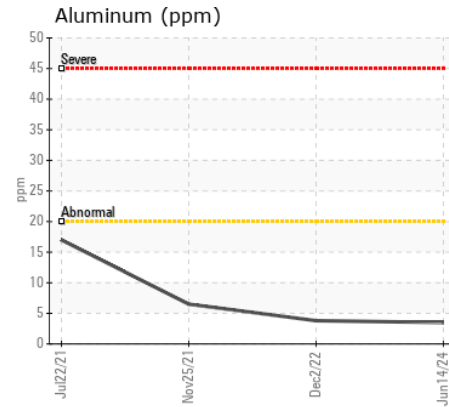
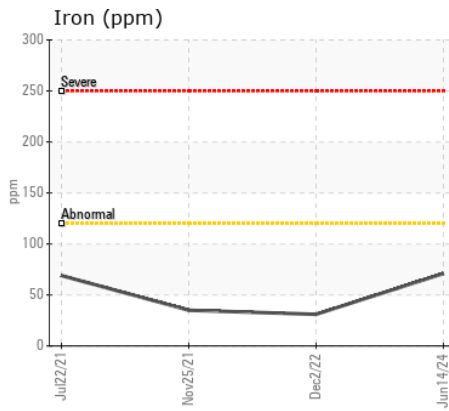
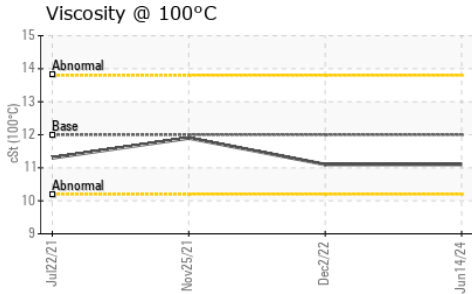
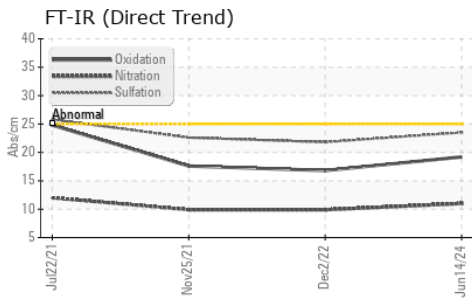
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	6	8
Potassium	ppm	ASTM D5185(m)	>20	3	9	16
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	0.6	0.4	0.4
Nitration	Abs/cm	ASTM D7624*	>20	11.0	9.9	9.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.5	21.8	22.6
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)		6	3	2
Boron	ppm	ASTM D5185(m)	2	2	2	2
Barium	ppm	ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	50	62	62	59
Manganese	ppm	ASTM D5185(m)	0	1	<1	1
Magnesium	ppm	ASTM D5185(m)	950	941	968	933
Calcium	ppm	ASTM D5185(m)	1050	1233	1157	1114
Phosphorus	ppm	ASTM D5185(m)	995	920	999	921
Zinc	ppm	ASTM D5185(m)	1180	1198	1213	1190
Sulfur	ppm	ASTM D5185(m)	2600	2168	2335	1960
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.2	16.8	17.6
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.1	11.1	11.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0120105 **Received** : 18 Jun 2024
Lab Number : 02642480 **Tested** : 18 Jun 2024
Unique Number : 5800019 **Diagnosed** : 18 Jun 2024 - Wes Davis
Test Package : MOB 1

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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.