



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
411002
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0111997	GFL0111986	GFL0090402
Sample Date		Client Info		19 Jun 2024	04 Jun 2024	26 Mar 2024
Machine Age	hrs	Client Info		7900	536	132620
Oil Age	hrs	Client Info		1086	0	0
Filter Age	hrs	Client Info		1086	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	5	29	7
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	0
Nickel	ppm	ASTM D5185(m)	>5	<1	3	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	1	7	2
Lead	ppm	ASTM D5185(m)	>40	0	5	0
Copper	ppm	ASTM D5185(m)	>330	1	227	5
Tin	ppm	ASTM D5185(m)	>15	0	3	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

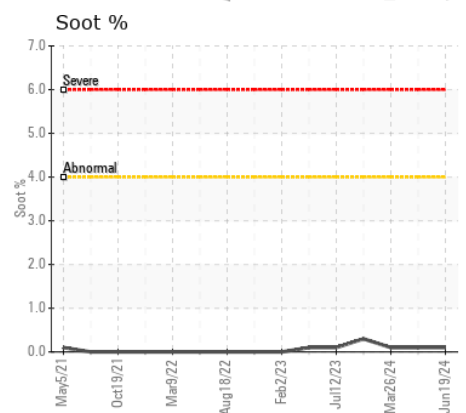
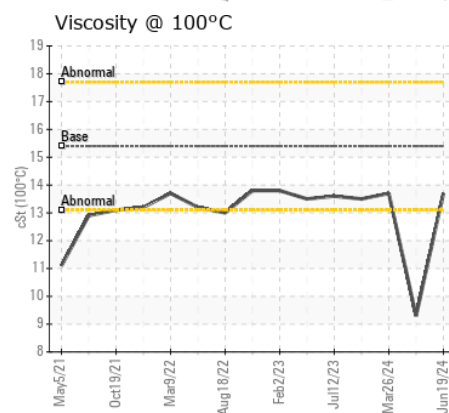
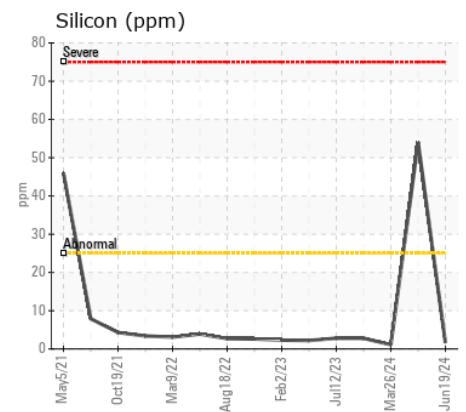
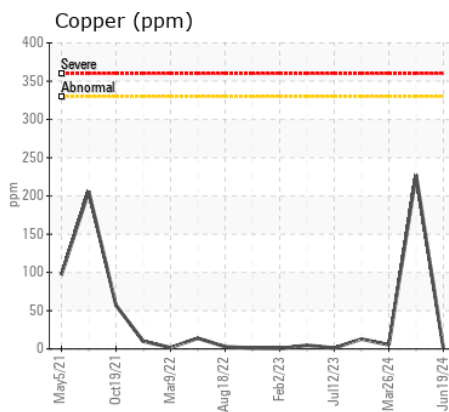
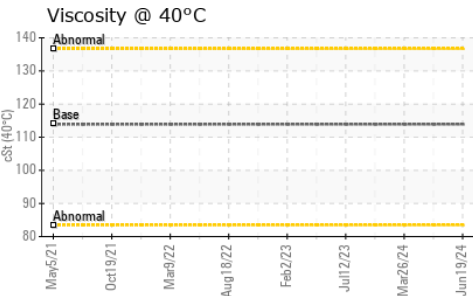
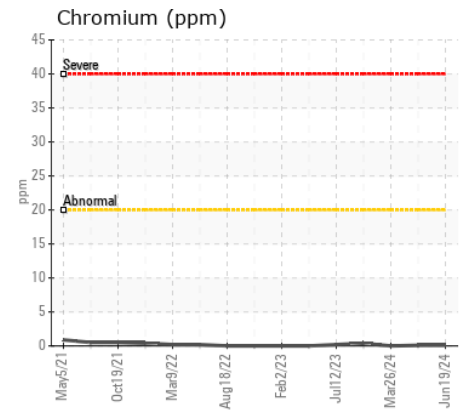
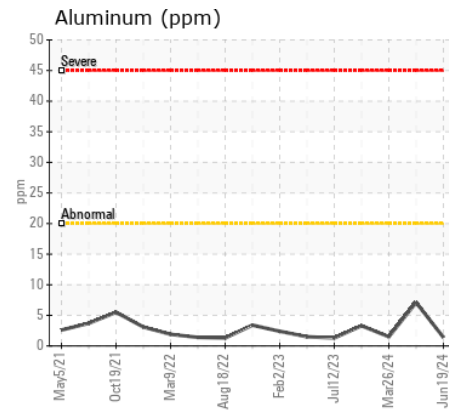
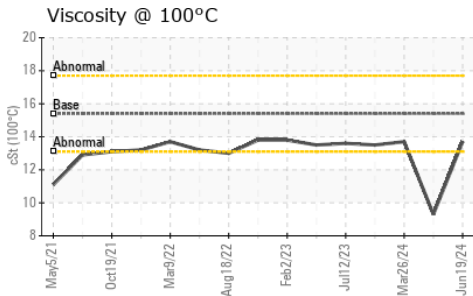
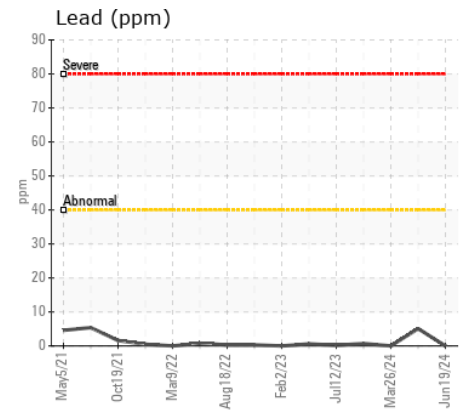
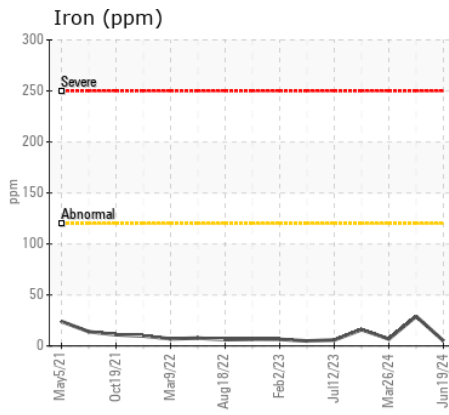
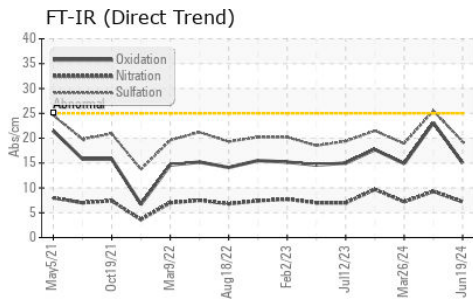
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	54	1
Potassium	ppm	ASTM D5185(m)	>20	1	12	2
Fuel		WC Method	>3.0	<1.0	0.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.1	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	7.2	9.3	7.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.3	25.5	18.9
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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)		3	3	5
Boron	ppm	ASTM D5185(m)	0	2	276	3
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	58	129	58
Manganese	ppm	ASTM D5185(m)	0	<1	4	0
Magnesium	ppm	ASTM D5185(m)	1010	939	690	981
Calcium	ppm	ASTM D5185(m)	1070	1038	1432	1050
Phosphorus	ppm	ASTM D5185(m)	1150	973	636	974
Zinc	ppm	ASTM D5185(m)	1270	1186	760	1177
Sulfur	ppm	ASTM D5185(m)	2060	2446	1849	2456
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.0	23.1	14.9
Visc @ 40°C	cSt	ASTM D7279(m)	113.9	99.2	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.7	▲ 9.3	13.7
Viscosity Index (VI)	Scale	ASTM D2270*	142	138	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0111997
Lab Number : 02643622
Unique Number : 5801161
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

Received : 24 Jun 2024
Tested : 24 Jun 2024
Diagnosed : 24 Jun 2024 - Wes Davis

GFL Environmental - 216M
 2475 Beryl Drive
 Oakville, ON
 CA L6J 7X4
 Contact: Matthew Guinness
 mgunness@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.