



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
7776
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (40 LTR)

RECOMMENDATION

Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0120070	GFL0113182	GFL0104502
Sample Date		Client Info		30 May 2024	23 Feb 2024	04 Dec 2023
Machine Age	kms	Client Info		169812	165979	162607
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>165	11	13	4
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	0
Nickel	ppm	ASTM D5185(m)	>4	0	<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)	>20	<1	2	1
Lead	ppm	ASTM D5185(m)	>150	<1	5	0
Copper	ppm	ASTM D5185(m)	>90	<1	1	<1
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

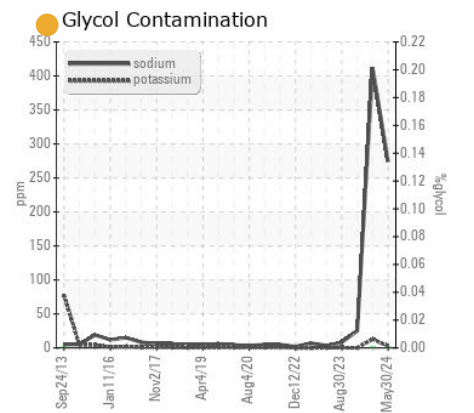
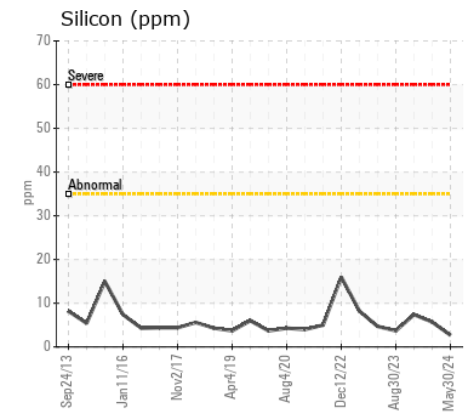
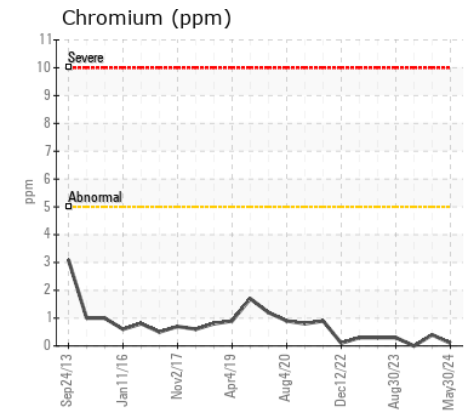
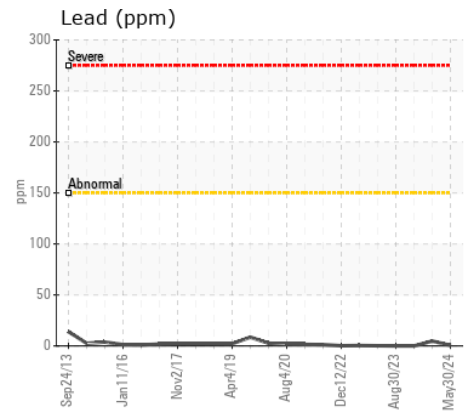
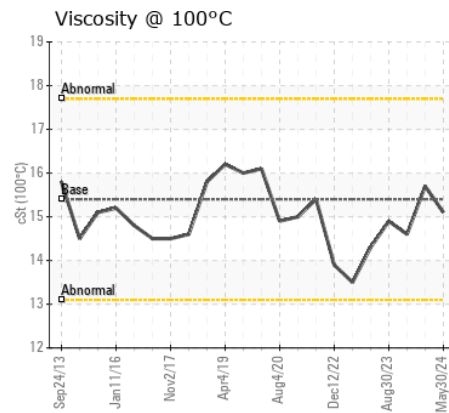
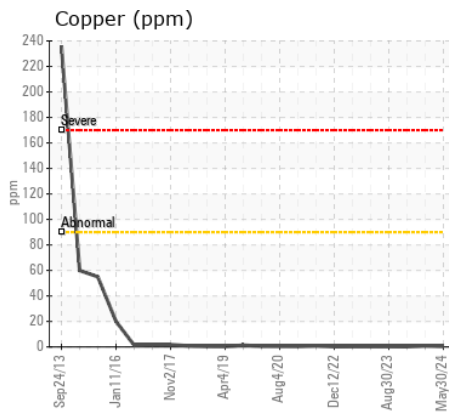
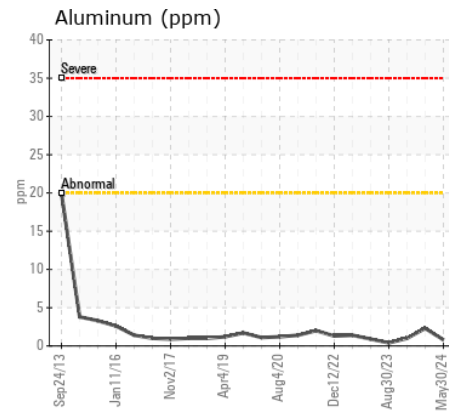
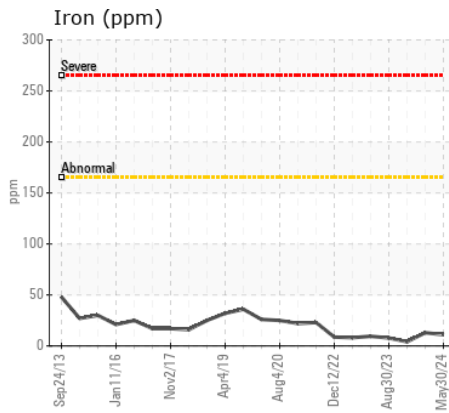
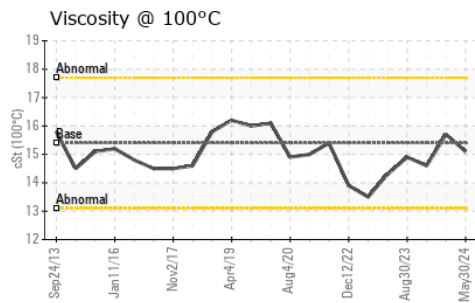
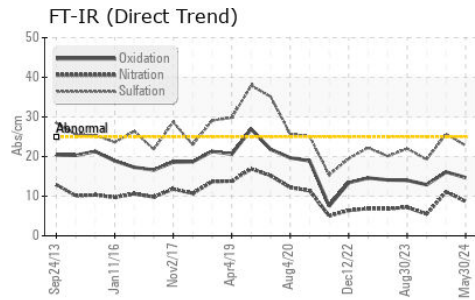
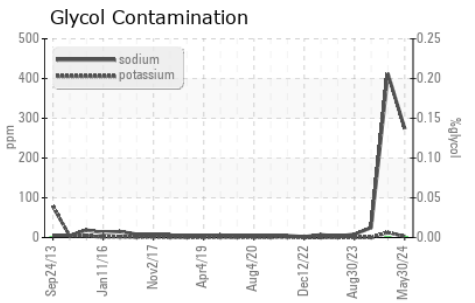
Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	3	6	7
Potassium	ppm	ASTM D5185(m)	>20	3	13	0
Fuel		WC Method	>3.0	<1.0	▲ 1.1	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	NEG
Soot %	%	ASTM D7844*	>7.5	1.9	3	0.8
Nitration	Abs/cm	ASTM D7624*	>20	8.7	11.1	5.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.8	25.7	19.3
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 (see recommendation).

Sodium	ppm	ASTM D5185(m)		● 274	● 412	25
Boron	ppm	ASTM D5185(m)	0	4	4	7
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	58	59	58
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	1010	919	881	938
Calcium	ppm	ASTM D5185(m)	1070	1007	973	1020
Phosphorus	ppm	ASTM D5185(m)	1150	987	953	952
Zinc	ppm	ASTM D5185(m)	1270	1140	1099	1145
Sulfur	ppm	ASTM D5185(m)	2060	2733	2586	2549
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.7	16.1	12.9
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	15.1	15.7	14.6



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0120070
Lab Number : 02639311
Unique Number : 5788473
Test Package : MOB 1 (Additional Tests: Glycol, Visual)

GFL Environmental - 225 - COT(D2)
 20 Brydon Drive
 Etobicoke, ON
 CA M9W 5R6
 Contact: Rick Philip
 rphilip@gflenv.com
 T: (416)745-8080
 F:

*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.*