

Machine Id
5605
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- LTR)

RECOMMENDATION

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0112574	GFL11955040	GFL11513658
Sample Date		Client Info		09 Apr 2024	20 Jan 2019	23 Jan 2018
Machine Age	hrs	Client Info		11657	10124	8615
Oil Age	hrs	Client Info		0	1509	0
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				SEVERE	SEVERE	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>110	18	72	▲ 80
Chromium	ppm	ASTM D5185(m)	>4	1	4	▲ 4
Nickel	ppm	ASTM D5185(m)	>2	<1	1	1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	2	3	6
Lead	ppm	ASTM D5185(m)	>45	0	4	9
Copper	ppm	ASTM D5185(m)	>85	4	3	3
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

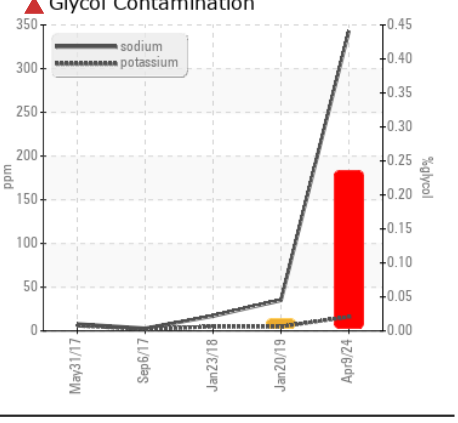
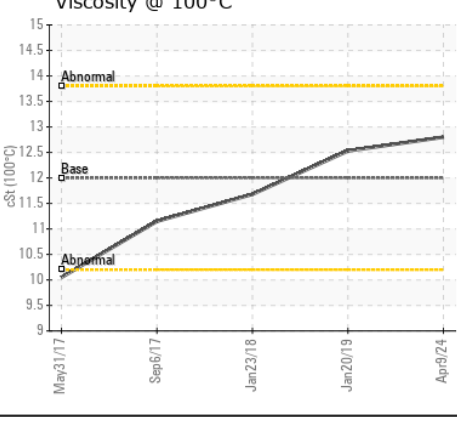
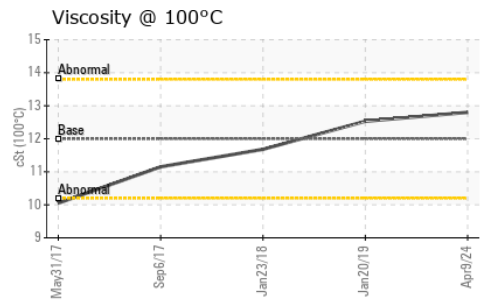
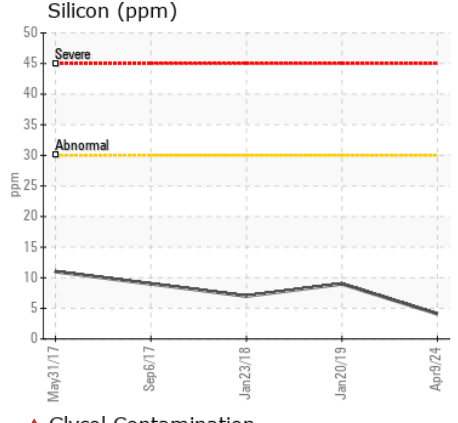
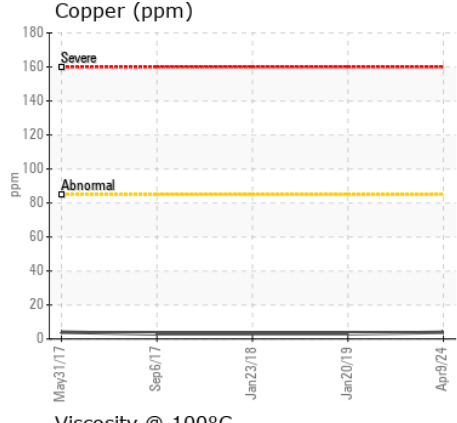
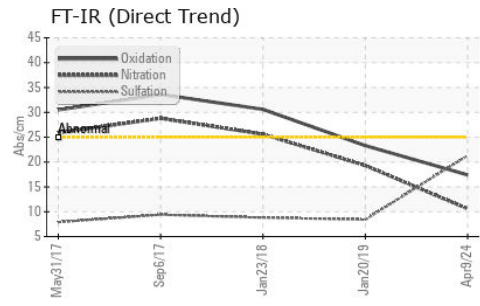
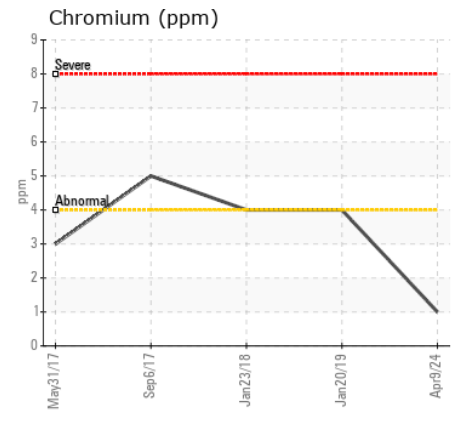
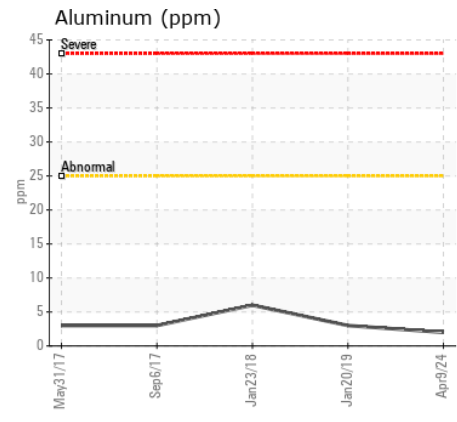
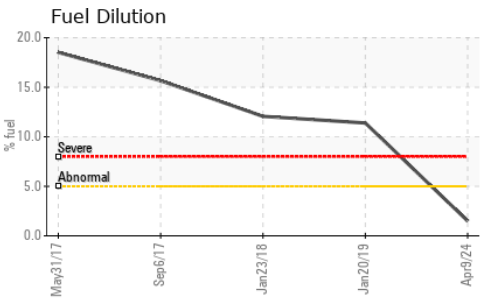
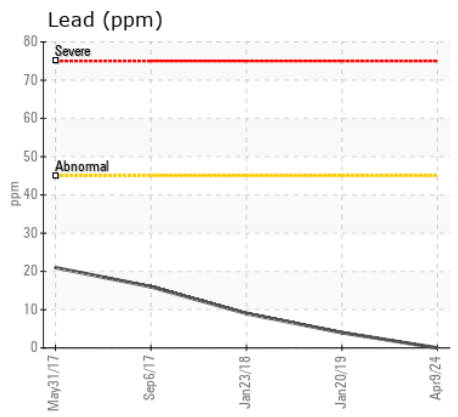
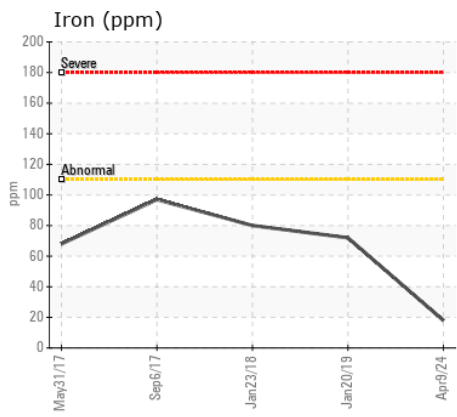
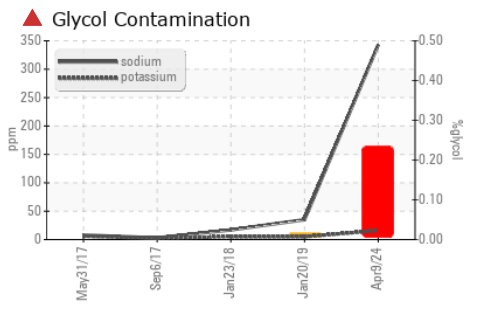
Test for glycol is positive. Light fuel dilution occurring. There is a high concentration of glycol present in the oil. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>30	4	9	7
Potassium	ppm	ASTM D5185(m)	>20	▲ 16	5	5
Fuel	%	ASTM D7593*	>5	1.5	▲ 11.39	▲ 12.06
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		▲ 0.235	▲ 0.017	NEG
Soot %	%	ASTM D7844*	>3	0.4	▲ 1.56	▲ 2.23
Nitration	Abs/cm	ASTM D7624*	>20	10.6	19.3	▲ 25.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.3	8.4	8.8
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		● 343	35	17
Boron	ppm	ASTM D5185(m)	2	2	5	15
Barium	ppm	ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	50	69	57	35
Manganese	ppm	ASTM D5185(m)	0	<1	---	---
Magnesium	ppm	ASTM D5185(m)	950	927	870	520
Calcium	ppm	ASTM D5185(m)	1050	984	935	1290
Phosphorus	ppm	ASTM D5185(m)	995	955	872	863
Zinc	ppm	ASTM D5185(m)	1180	1129	1030	945
Sulfur	ppm	ASTM D5185(m)	2600	2383	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.4	23.3	▲ 30.6
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	12.8	12.53	▲ 11.68



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112574 **Received** : 18 Apr 2024
Lab Number : 02629863 **Tested** : 19 Apr 2024
Unique Number : 5762995 **Diagnosed** : 19 Apr 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol, PercentFuel)

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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.