

Machine Id
7798
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (40 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0113174	GFL0096997	GFL0085258
Sample Date		Client Info		29 Feb 2024	02 Oct 2023	25 May 2023
Machine Age	kms	Client Info		115227	113690	111192
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				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>165	15	6	10
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	1	<1	1
Lead	ppm	ASTM D5185(m)	>150	3	<1	<1
Copper	ppm	ASTM D5185(m)	>90	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>5	<1	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

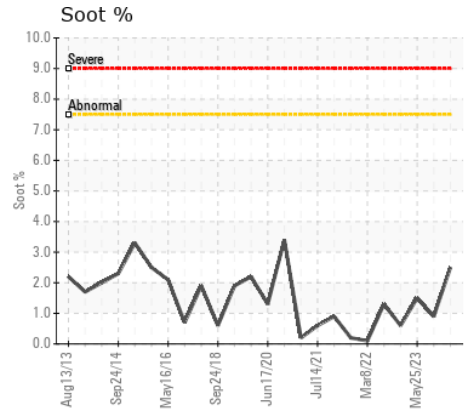
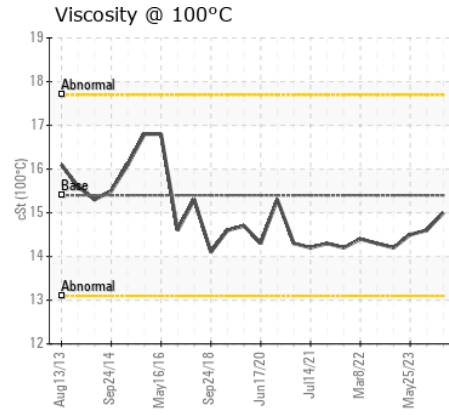
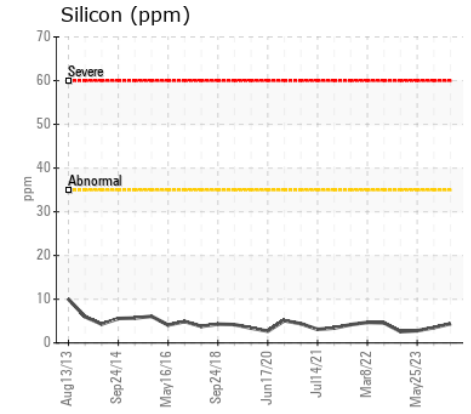
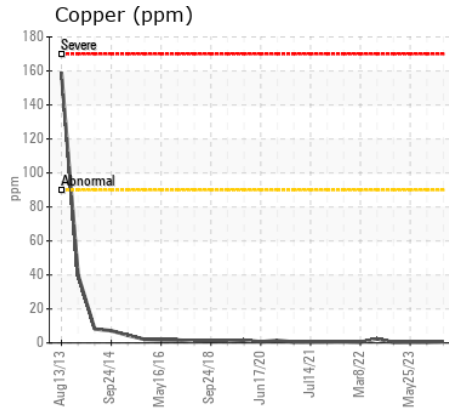
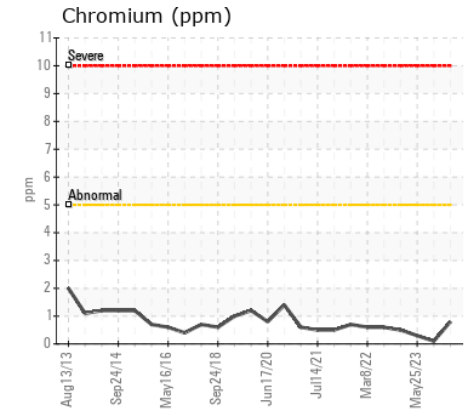
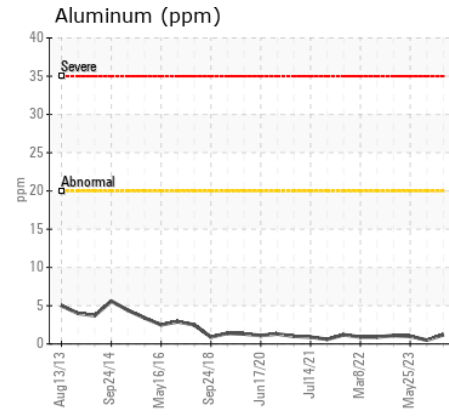
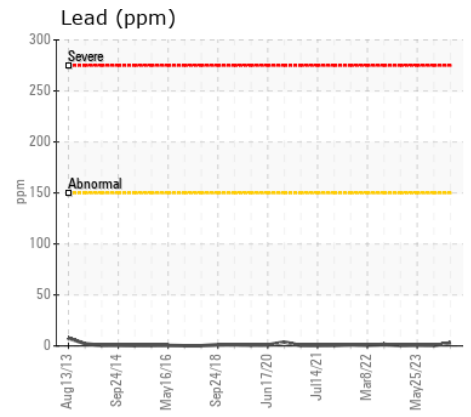
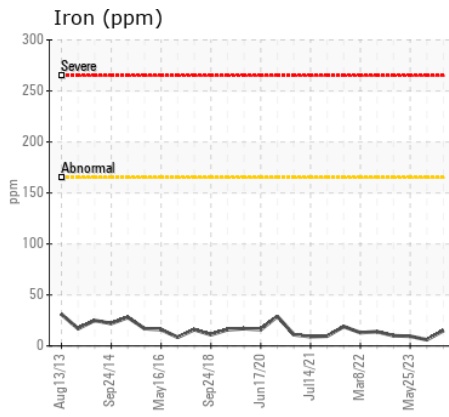
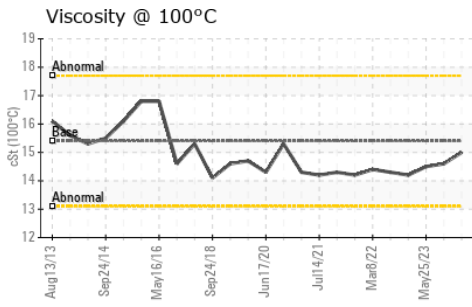
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	4	4	3
Potassium	ppm	ASTM D5185(m)	>20	1	<1	0
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*	>7.5	2.5	0.9	1.5
Nitration	Abs/cm	ASTM D7624*	>20	13.0	8.1	9.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.4	21.4	23.2
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)		4	3	3
Boron	ppm	ASTM D5185(m)	0	4	3	3
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	61	61	61
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	961	988	965
Calcium	ppm	ASTM D5185(m)	1070	1094	1101	1087
Phosphorus	ppm	ASTM D5185(m)	1150	1024	1038	1101
Zinc	ppm	ASTM D5185(m)	1270	1202	1226	1200
Sulfur	ppm	ASTM D5185(m)	2060	2597	2596	2575
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.8	15.4	16.8
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	15.0	14.6	14.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113174
Lab Number : 02619464
Unique Number : 5736574
Test Package : MOB 1
Received : 04 Mar 2024
Tested : 04 Mar 2024
Diagnosed : 04 Mar 2024 - Wes Davis

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.