



Machine Id
7794
 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		GFL0125797	GFL0107863	GFL0104519
Sample Date		Client Info		08 Jun 2024	23 Feb 2024	13 Dec 2023
Machine Age	kms	Client Info		145402	144724	142063
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	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>165	9	11	13
Chromium	ppm	ASTM D5185(m)	>5	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
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	1	1
Lead	ppm	ASTM D5185(m)	>150	2	1	1
Copper	ppm	ASTM D5185(m)	>90	2	<1	<1
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

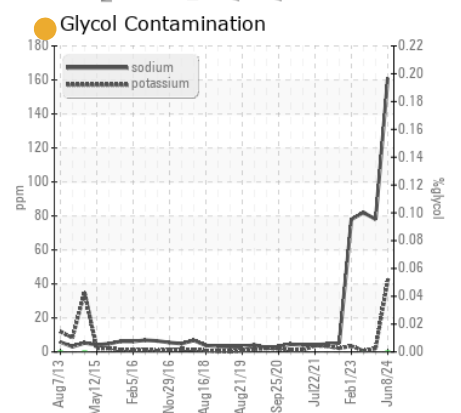
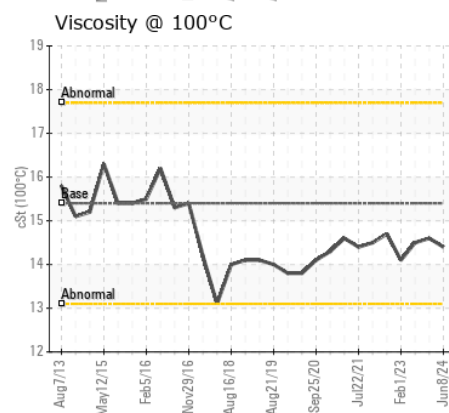
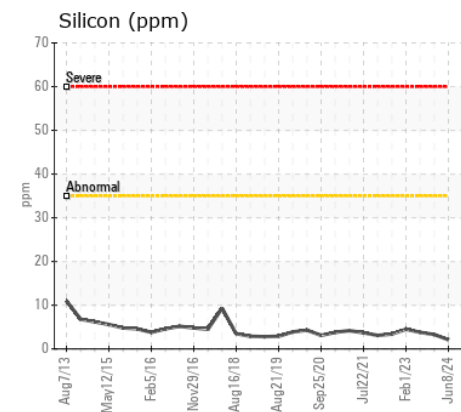
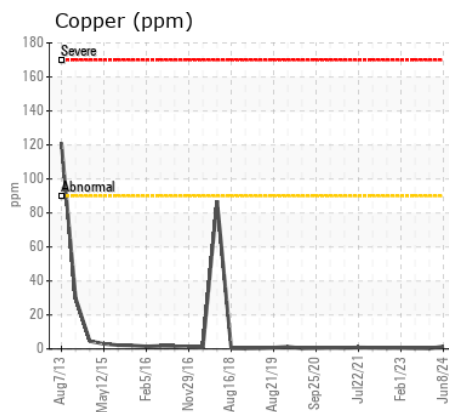
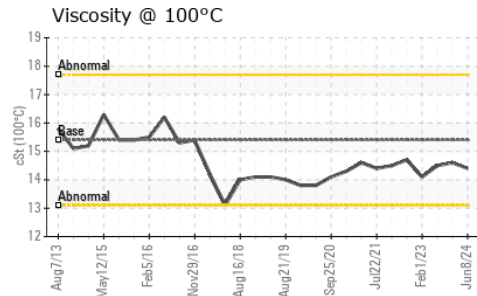
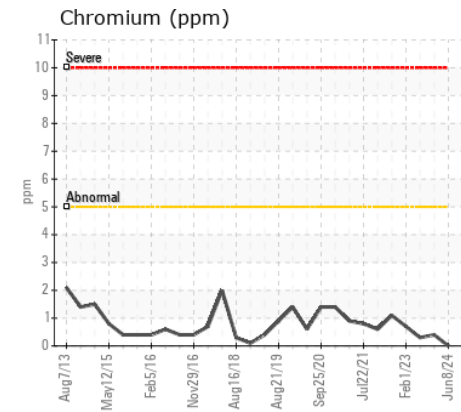
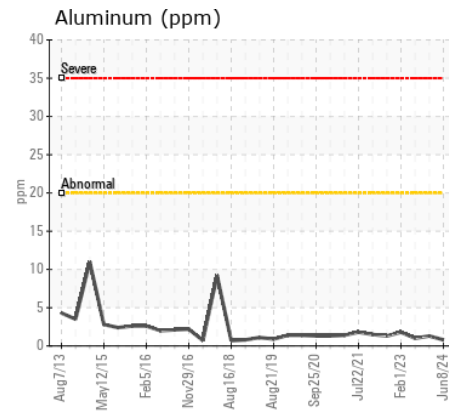
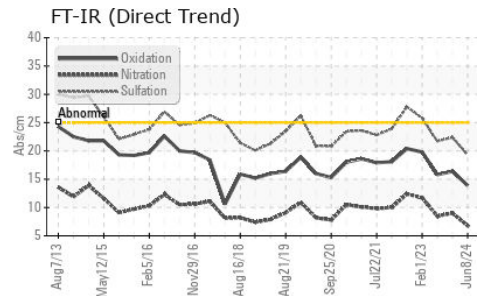
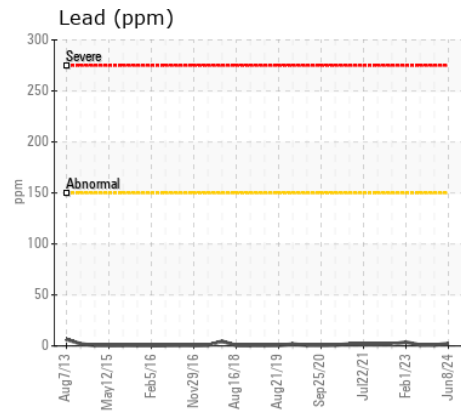
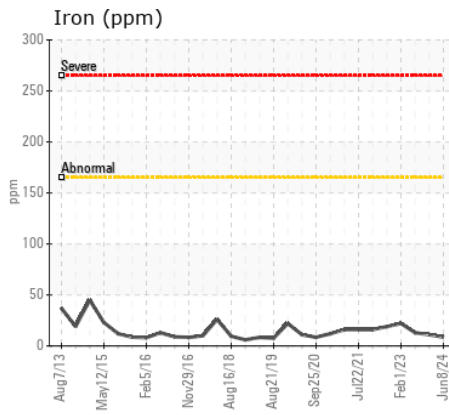
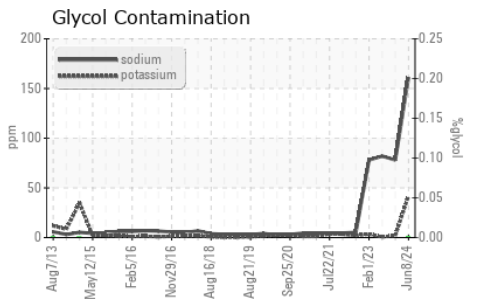
Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	2	3	4
Potassium	ppm	ASTM D5185(m)	>20	42	2	<1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	NEG	0.0
Soot %	%	ASTM D7844*	>7.5	0.4	1.3	1
Nitration	Abs/cm	ASTM D7624*	>20	6.8	9.0	8.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.3	22.4	21.7
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)		161	78	82
Boron	ppm	ASTM D5185(m)	0	3	4	3
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	59	59	61
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	1010	934	931	972
Calcium	ppm	ASTM D5185(m)	1070	1008	1023	1084
Phosphorus	ppm	ASTM D5185(m)	1150	975	990	990
Zinc	ppm	ASTM D5185(m)	1270	1117	1147	1205
Sulfur	ppm	ASTM D5185(m)	2060	2524	2670	2505
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.9	16.4	15.8
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.4	14.6	14.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0125797
Lab Number : 02641577
Unique Number : 5799116
Test Package : MOB 1 (Additional Tests: Glycol)

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.