



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
411037
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0119495	GFL0082154	GFL0060898
Sample Date		Client Info		01 Jul 2024	24 May 2023	17 Mar 2023
Machine Age	hrs	Client Info		3783	2062	1811
Oil Age	hrs	Client Info		261	251	669
Filter Age	hrs	Client Info		261	251	669
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	6	10	22
Chromium	ppm	ASTM D5185(m)	>20	0	0	<1
Nickel	ppm	ASTM D5185(m)	>15	<1	2	6
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	1	3	8
Lead	ppm	ASTM D5185(m)	>40	0	1	3
Copper	ppm	ASTM D5185(m)	>330	2	11	63
Tin	ppm	ASTM D5185(m)	>15	<1	<1	2
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

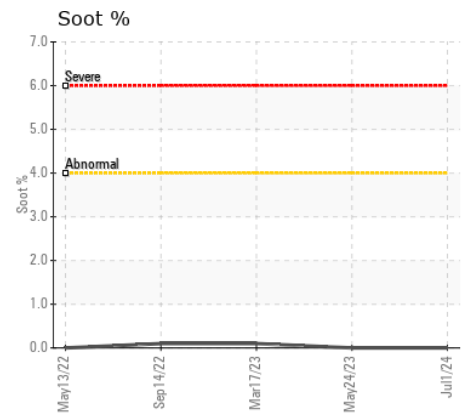
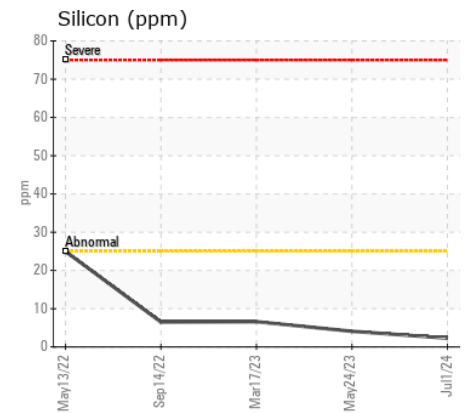
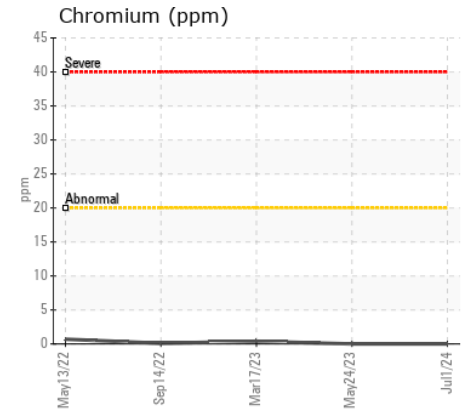
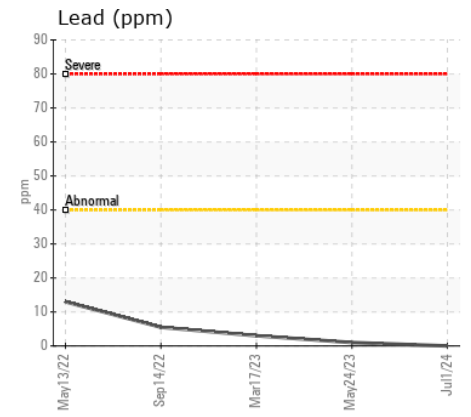
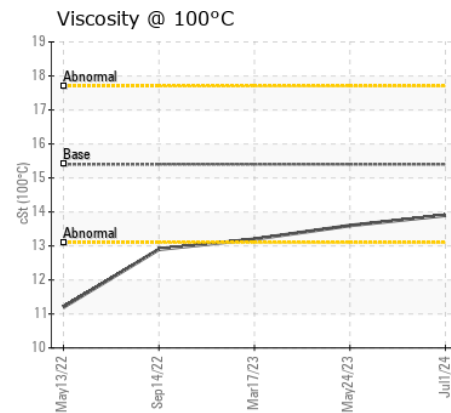
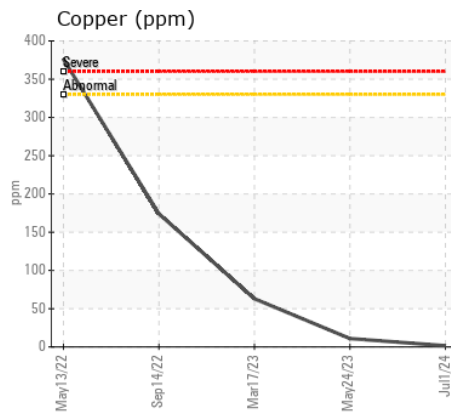
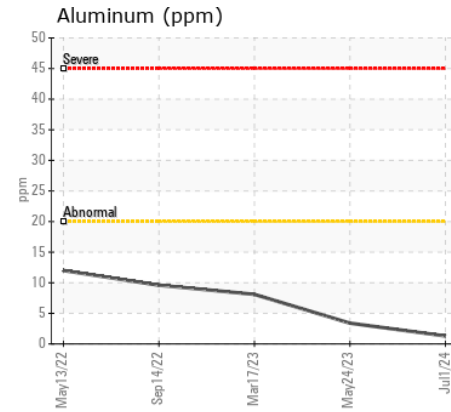
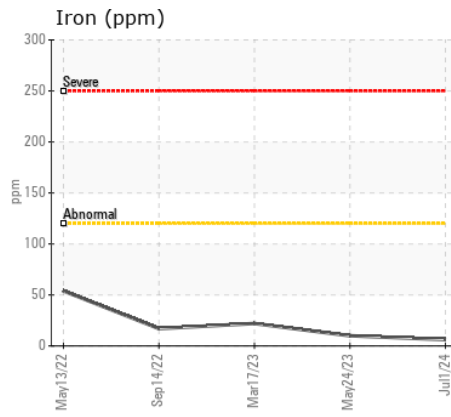
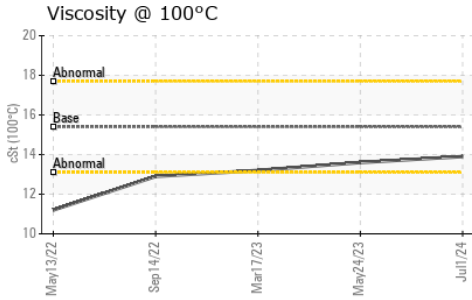
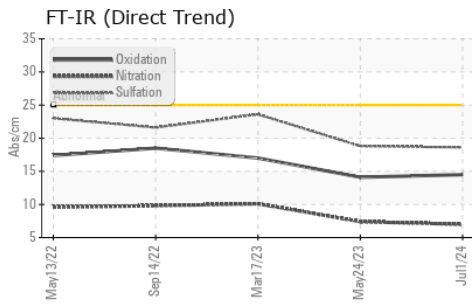
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	4	7
Potassium	ppm	ASTM D5185(m)	>20	2	7	21
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*	>4	0	0	0.1
Nitration	Abs/cm	ASTM D7624*	>20	7.0	7.4	10.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.6	18.8	23.6
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)		1	1	2
Boron	ppm	ASTM D5185(m)	0	4	7	7
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	56	55	49
Manganese	ppm	ASTM D5185(m)	0	<1	<1	1
Magnesium	ppm	ASTM D5185(m)	1010	912	931	851
Calcium	ppm	ASTM D5185(m)	1070	1066	1204	1296
Phosphorus	ppm	ASTM D5185(m)	1150	942	1052	953
Zinc	ppm	ASTM D5185(m)	1270	1148	1144	1111
Sulfur	ppm	ASTM D5185(m)	2060	2482	2578	2482
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.5	14.1	17.0
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.9	13.6	13.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0119495
Lab Number : 02644792
Unique Number : 5802331
Test Package : MOB 1
Received : 02 Jul 2024
Tested : 02 Jul 2024
Diagnosed : 02 Jul 2024 - Wes Davis

GFL Environmental - 582 - Nanaimo
 3469 Aqua Terra Rd.,
 Cassidy, BC
 CA V0R 1H0
 Contact: GFL Tech
 wcgfldemo@gmail.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.

T:
F: