



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
427009
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0111989	GFL0090408	GFL0090392
Sample Date		Client Info		15 Apr 2024	13 Feb 2024	21 Dec 2023
Machine Age	hrs	Client Info		384057	16895	360799
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	13	10	9
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	2
Lead	ppm	ASTM D5185(m)	>40	1	1	<1
Copper	ppm	ASTM D5185(m)	>330	2	1	2
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

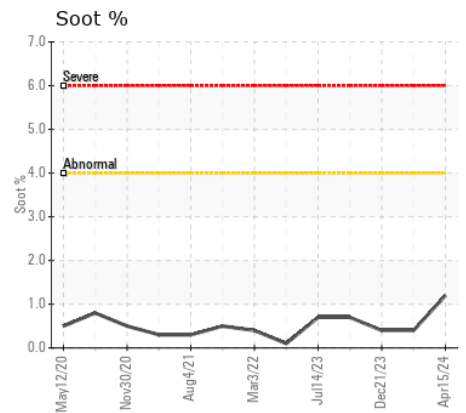
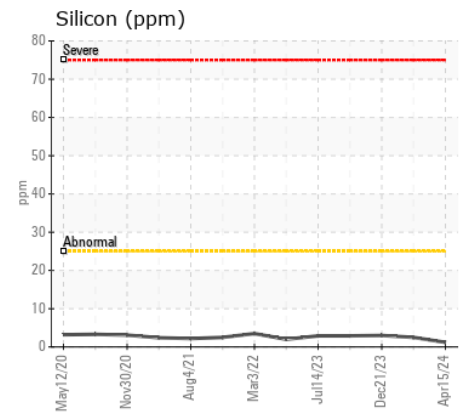
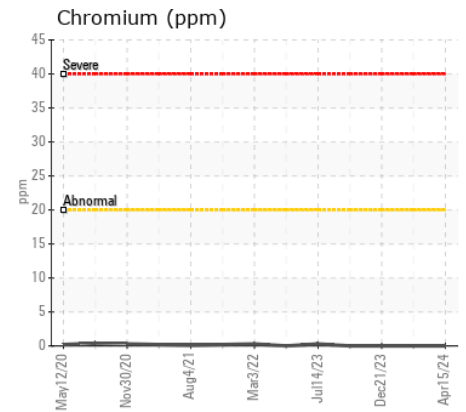
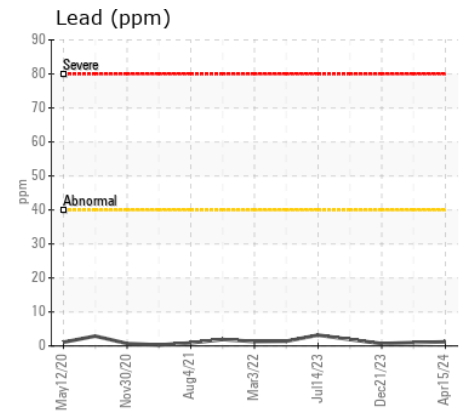
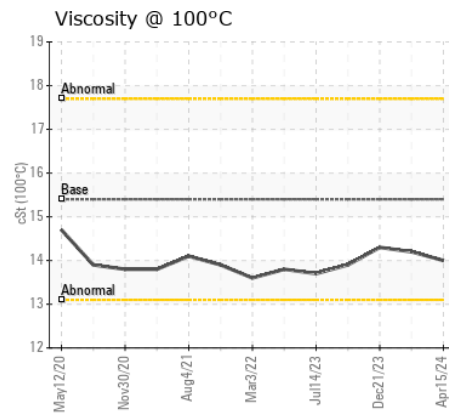
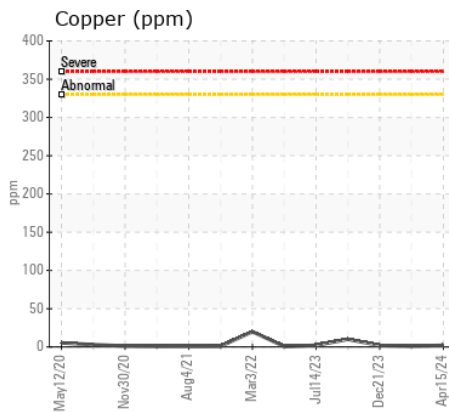
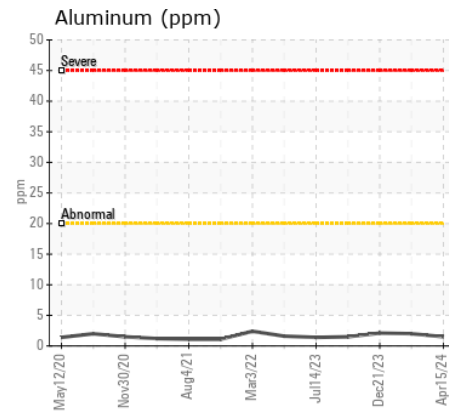
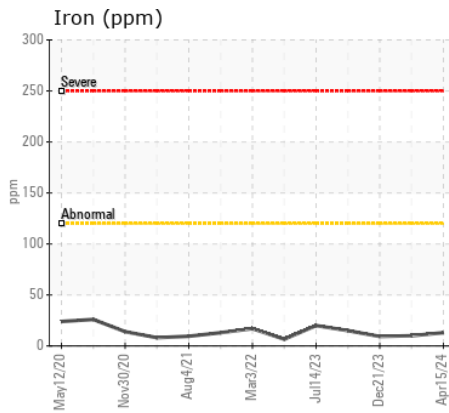
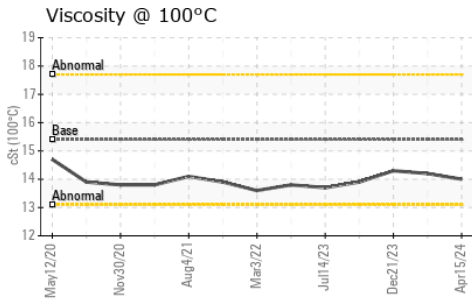
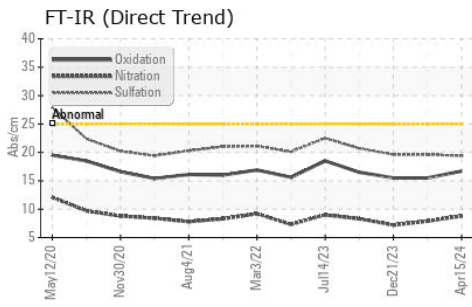
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	1	2	3
Potassium	ppm	ASTM D5185(m)	>20	1	1	3
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	1.2	0.4	0.4
Nitration	Abs/cm	ASTM D7624*	>20	8.8	7.9	7.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.4	19.6	19.6
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)		6	2	3
Boron	ppm	ASTM D5185(m)	0	3	2	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	59	59	58
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	1010	981	977	969
Calcium	ppm	ASTM D5185(m)	1070	1067	1068	1054
Phosphorus	ppm	ASTM D5185(m)	1150	989	1030	999
Zinc	ppm	ASTM D5185(m)	1270	1208	1208	1172
Sulfur	ppm	ASTM D5185(m)	2060	2398	2740	2590
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.7	15.5	15.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.0	14.2	14.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0111989 **Received** : 18 Apr 2024
Lab Number : 02629835 **Tested** : 18 Apr 2024
Unique Number : 5762967 **Diagnosed** : 18 Apr 2024 - Wes Davis
Test Package : MOB 1

GFL Environmental - 216M
 2475 Beryl Drive
 Oakville, ON
 CA L6J 7X4
 Contact: Matthew Guinness
 mgunness@gflenv.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: