



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[1273172]

Machine Id

101045

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		GFL0118520	GFL0102722	GFL0094507
Sample Date		Client Info		07 May 2024	30 Jan 2024	03 Oct 2023
Machine Age	hrs	Client Info		14559	14058	13526
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>65	20	15	17
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>3	0	0	0
Titanium	ppm	ASTM D5185(m)	>5	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>35	2	2	<1
Lead	ppm	ASTM D5185(m)	>10	8	6	4
Copper	ppm	ASTM D5185(m)	>180	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>8	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

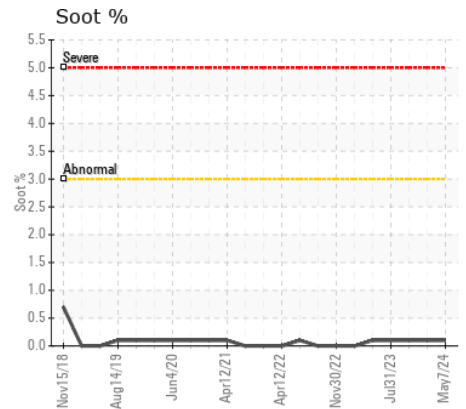
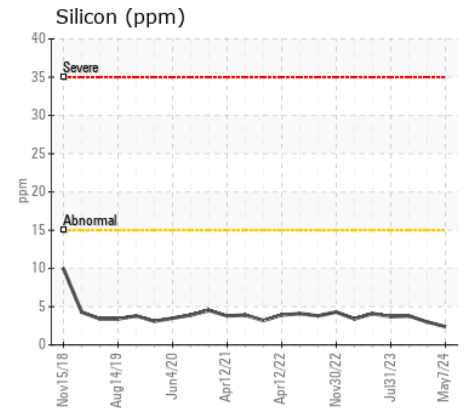
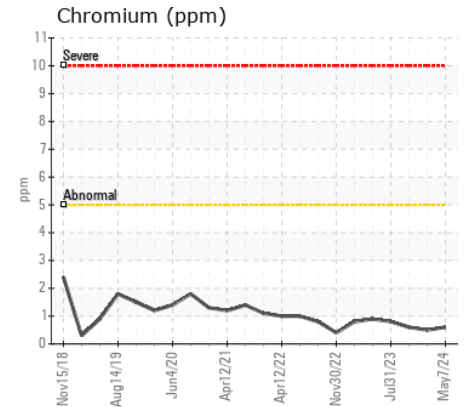
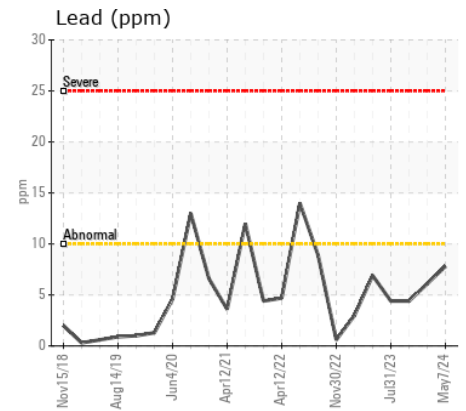
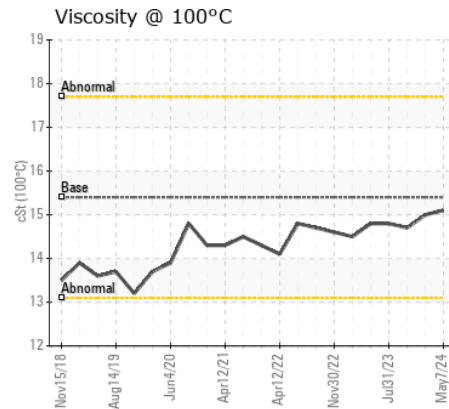
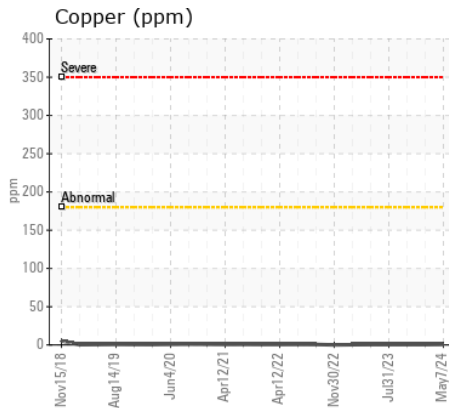
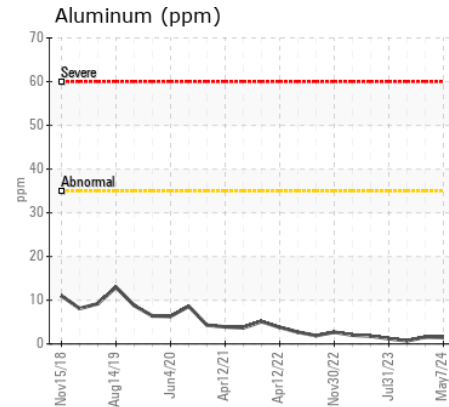
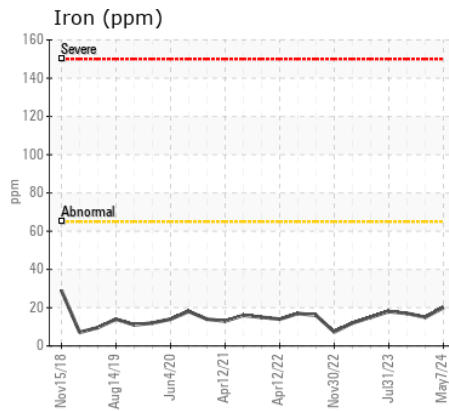
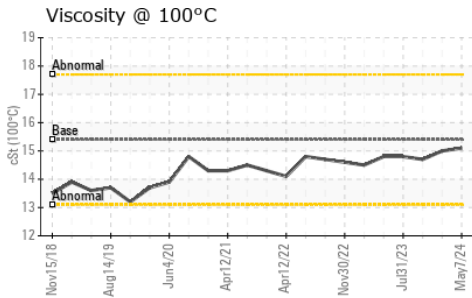
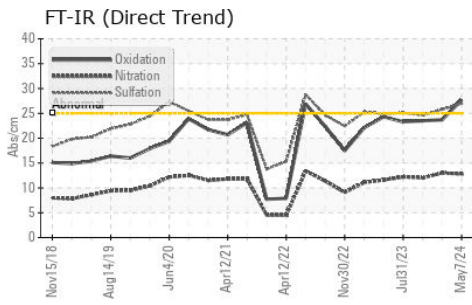
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	2	3	4
Potassium	ppm	ASTM D5185(m)	>20	3	2	<1
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*	>3	0.1	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	12.8	13.0	12.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.0	25.8	24.6
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	4	6
Boron	ppm	ASTM D5185(m)	0	3	2	3
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	68	64	66
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	1010	1123	1045	1079
Calcium	ppm	ASTM D5185(m)	1070	1219	1175	1205
Phosphorus	ppm	ASTM D5185(m)	1150	1106	1055	1096
Zinc	ppm	ASTM D5185(m)	1270	1347	1285	1346
Sulfur	ppm	ASTM D5185(m)	2060	2603	2732	2650
Oxidation	Abs/.1mm	ASTM D7414*	>25	27.7	23.7	23.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	15.1	15.0	14.7



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0118520
Lab Number : 02634246
Unique Number : 5775399
Test Package : MOB 1

GFL Environmental - 207 - Pickering SW
 1034 TOY AVENUE, PICKERING YARD
 PICKERING, ON
 CA L1W 3P1
 Contact: Ian Patton
 ipatton@gflenv.com
 T: (905)831-6297
 F: (905)426-3577

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.