



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
511028
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0108180	GFL0056779	GFL0043818
Sample Date		Client Info		16 Feb 2024	31 Aug 2022	10 Mar 2022
Machine Age	kms	Client Info		385847	189271	145843
Oil Age	kms	Client Info		0	0	60000
Filter Age	kms	Client Info		0	0	60000
Oil Changed		Client Info		Not Changd	N/A	N/A
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	19	26	31
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	4	4
Titanium	ppm	ASTM D5185(m)	>2	0	<1	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	3	5
Lead	ppm	ASTM D5185(m)	>40	2	4	4
Copper	ppm	ASTM D5185(m)	>330	6	50	73
Tin	ppm	ASTM D5185(m)	>15	<1	1	2
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

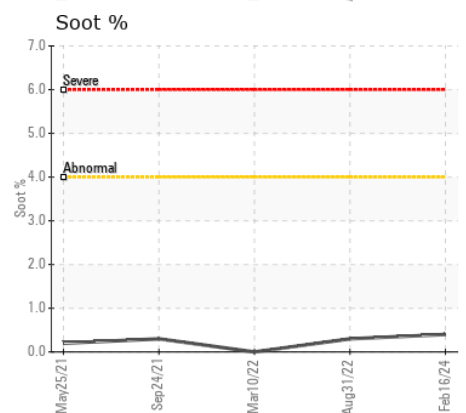
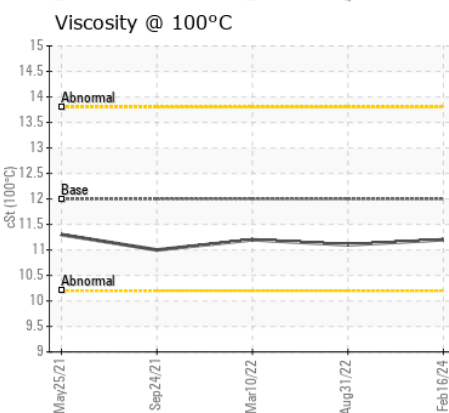
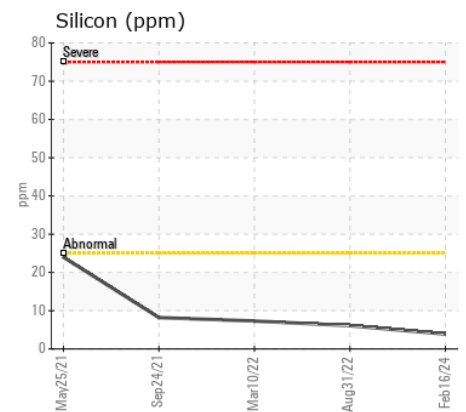
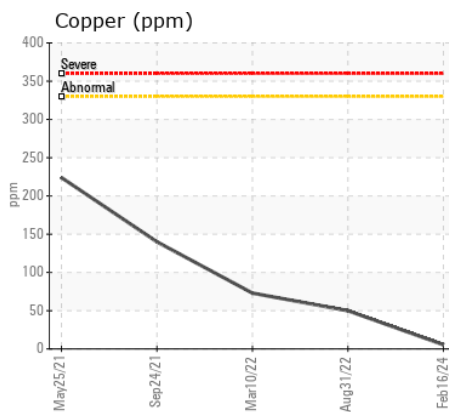
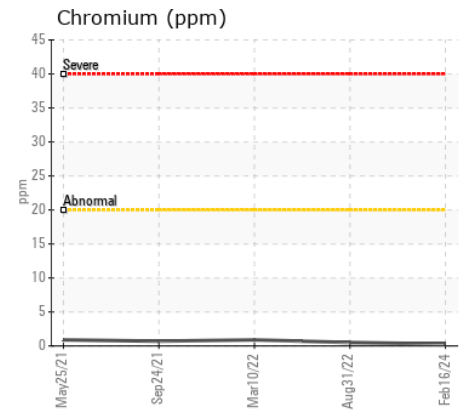
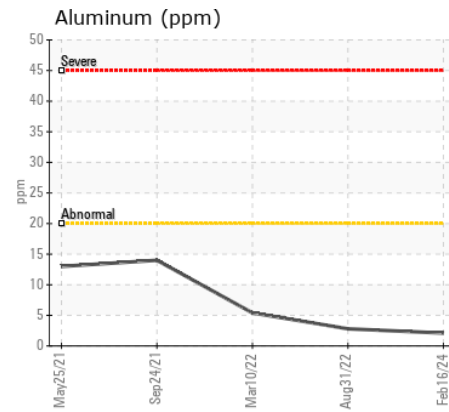
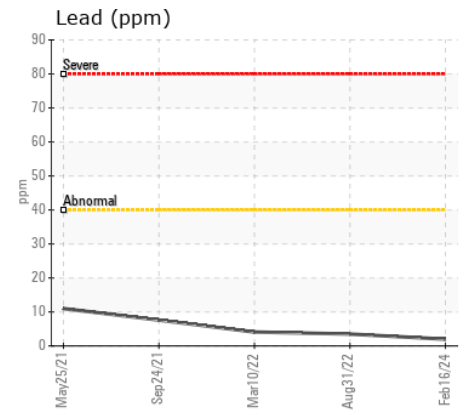
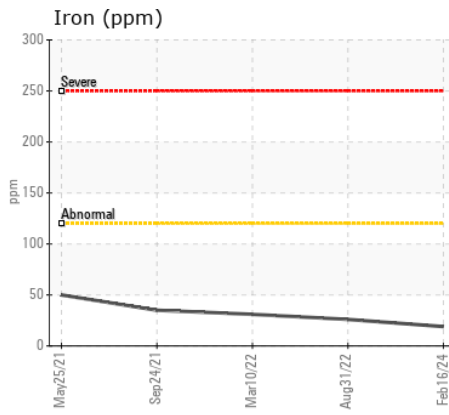
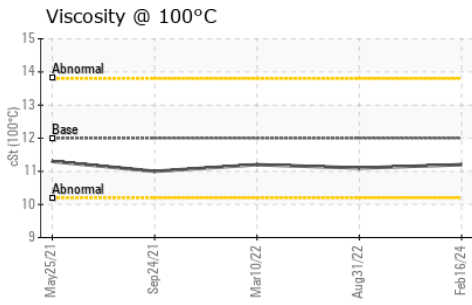
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	6	7
Potassium	ppm	ASTM D5185(m)	>20	2	6	12
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	0.4	0.3	0
Nitration	Abs/cm	ASTM D7624*	>20	9.3	9.5	4.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.1	21.7	14.7
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)		12	2	2
Boron	ppm	ASTM D5185(m)	2	4	2	4
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	62	59	62
Manganese	ppm	ASTM D5185(m)	0	0	<1	2
Magnesium	ppm	ASTM D5185(m)	950	957	928	964
Calcium	ppm	ASTM D5185(m)	1050	1123	1086	1074
Phosphorus	ppm	ASTM D5185(m)	995	954	840	910
Zinc	ppm	ASTM D5185(m)	1180	1181	1121	1162
Sulfur	ppm	ASTM D5185(m)	2600	2348	2037	2102
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.2	17.0	7.3
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.2	11.1	11.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0108180 **Received** : 21 Feb 2024
Lab Number : 02616855 **Tested** : 21 Feb 2024
Unique Number : 5733965 **Diagnosed** : 21 Feb 2024 - Kevin Marson
Test Package : MOB 1

GFL Environmental - 245 - BJ Bear
 2616 Cedar Creek Road
 Ayr, ON
 CA N0B 1E0
 Contact: Erik Prpic
 eprpic@gflenv.com
 T: (519)570-9000
 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.