



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
511014
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		GFL0115529	GFL0079646	GFL0072245
Sample Date		Client Info		25 Mar 2024	12 Apr 2023	16 Mar 2023
Machine Age	kms	Client Info		536869	429987	420731
Oil Age	kms	Client Info		106882	0	58687
Filter Age	kms	Client Info		0	0	58687
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	22	8	20
Chromium	ppm	ASTM D5185(m)	>20	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>15	<1	<1	1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	3	1	3
Lead	ppm	ASTM D5185(m)	>40	2	<1	2
Copper	ppm	ASTM D5185(m)	>330	34	4	9
Tin	ppm	ASTM D5185(m)	>15	<1	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

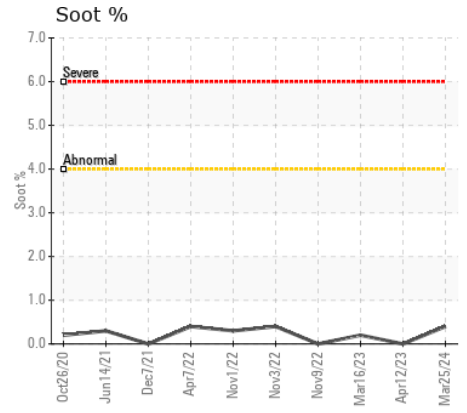
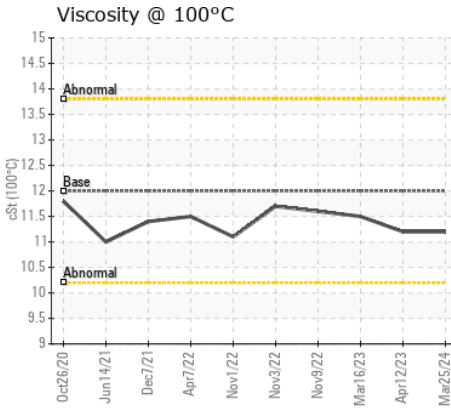
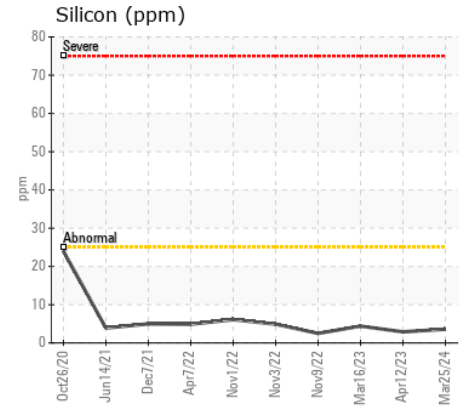
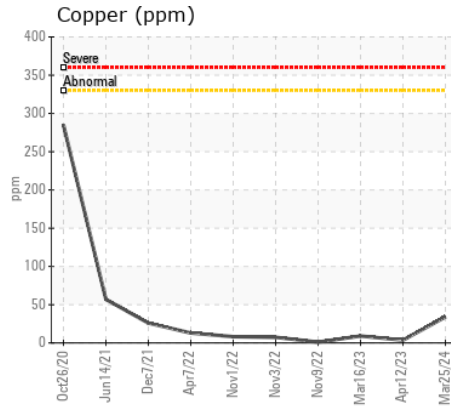
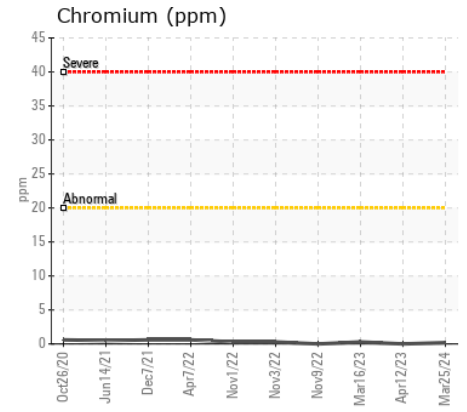
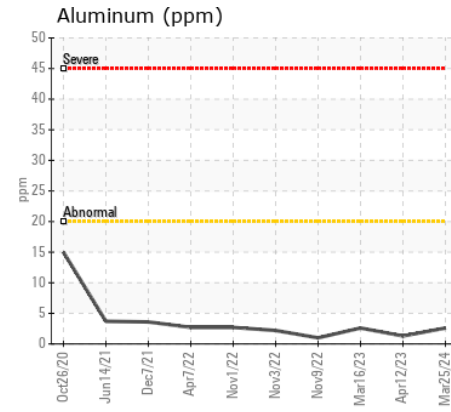
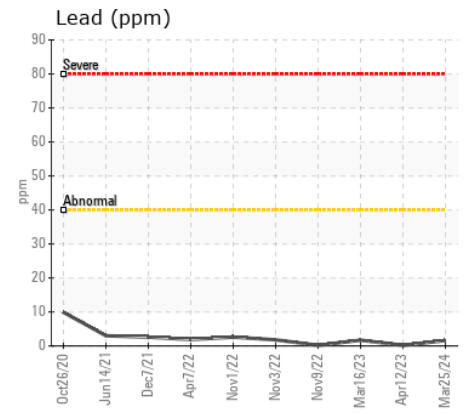
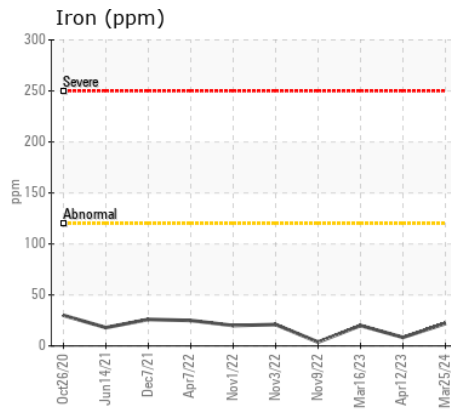
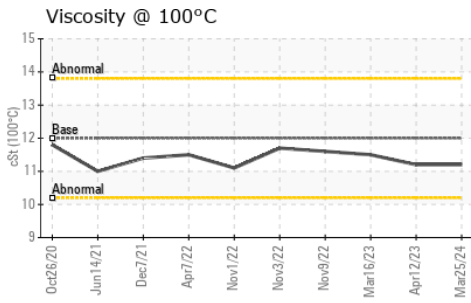
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	3	4
Potassium	ppm	ASTM D5185(m)	>20	3	<1	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*	>4	0.4	0	0.2
Nitration	Abs/cm	ASTM D7624*	>20	10.4	6.7	9.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.1	21.3	23.9
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)		2	2	2
Boron	ppm	ASTM D5185(m)	2	3	8	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	58	61	63
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	919	956	1006
Calcium	ppm	ASTM D5185(m)	1050	1178	1119	1165
Phosphorus	ppm	ASTM D5185(m)	995	926	1094	1053
Zinc	ppm	ASTM D5185(m)	1180	1138	1195	1241
Sulfur	ppm	ASTM D5185(m)	2600	2394	2706	2351
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.4	14.6	17.8
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.2	11.2	11.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0115529
Lab Number : 02625117
Unique Number : 5750236
Test Package : MOB 1
Received : 28 Mar 2024
Tested : 28 Mar 2024
Diagnosed : 28 Mar 2024 - Wes Davis

GFL Environmental - 245 - BJ Bear
 2616 Cedar Creek Road
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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.