



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
811017
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (20 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0059105	GFL0059068	GFL0059053
Sample Date		Client Info		03 Mar 2024	04 Aug 2023	07 Feb 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		600	600	600
Filter Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	MARGINAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	43	30	15
Chromium	ppm	ASTM D5185(m)	>5	2	2	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>30	5	8	2
Lead	ppm	ASTM D5185(m)	>30	0	<1	0
Copper	ppm	ASTM D5185(m)	>150	3	8	2
Tin	ppm	ASTM D5185(m)	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

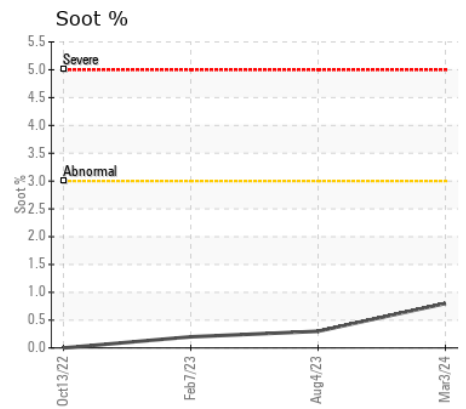
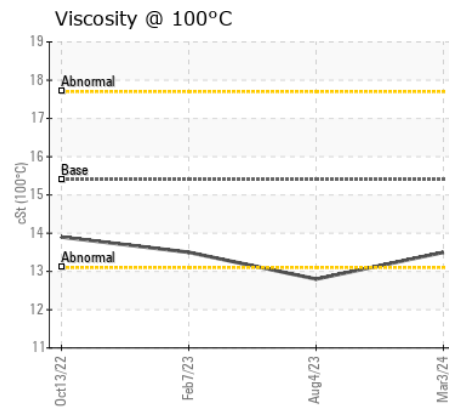
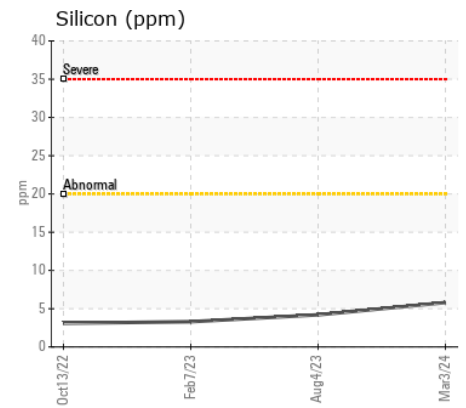
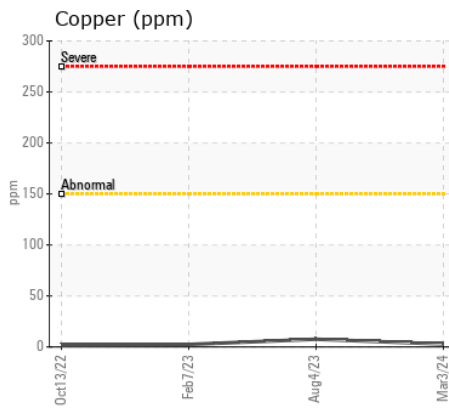
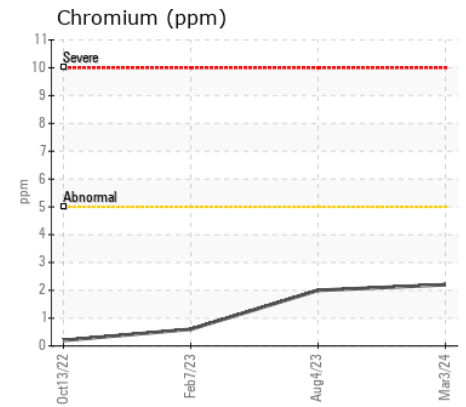
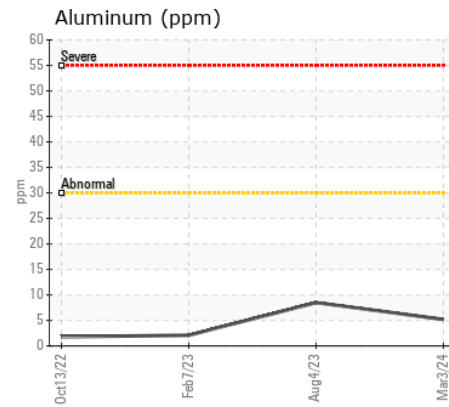
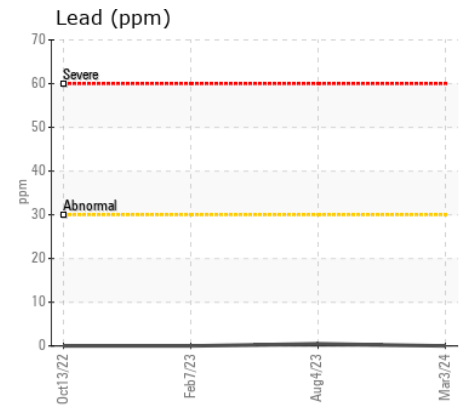
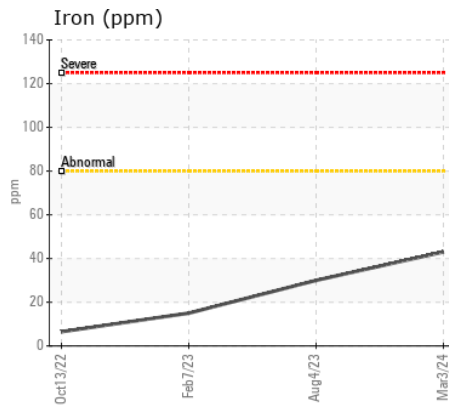
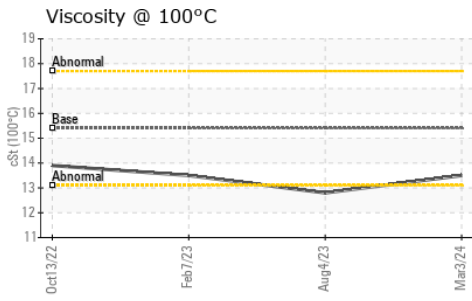
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	6	4	3
Potassium	ppm	ASTM D5185(m)	>20	5	9	<1
Fuel		WC Method	>5	<1.0	▲ 3.3	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.8	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	11.0	8.5	9.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.1	19.6	21.0
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)		3	5	2
Boron	ppm	ASTM D5185(m)	0	3	4	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	60	59	59
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	970	951	932
Calcium	ppm	ASTM D5185(m)	1070	1073	1056	1078
Phosphorus	ppm	ASTM D5185(m)	1150	978	1027	1043
Zinc	ppm	ASTM D5185(m)	1270	1194	1189	1176
Sulfur	ppm	ASTM D5185(m)	2060	2414	2436	2516
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.9	15.0	16.6
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.5	12.8	13.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0059105
Lab Number : 02619497
Unique Number : 5736607
Test Package : MOB 1
Received : 04 Mar 2024
Tested : 04 Mar 2024
Diagnosed : 04 Mar 2024 - Wes Davis

GFL Environmental - 570 - Thunder Bay
 3000 Highway 61,
 Slate River, ON
 CA P7J 0G8
 Contact: Cindy Wall
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 T: (807)577-0411
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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.