



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
813054
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		GFL0113658	GFL0067893	GFL0067984
Sample Date		Client Info		21 May 2024	28 Apr 2023	03 Apr 2023
Machine Age	hrs	Client Info		263	131	131
Oil Age	hrs	Client Info		263	131	0
Filter Age	hrs	Client Info		263	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>120	11	25	16
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>5	2	3	2
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	1	0	0
Aluminum	ppm	ASTM D5185m	>20	2	4	2
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	2	5	3
Tin	ppm	ASTM D5185m	>15	2	3	2
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

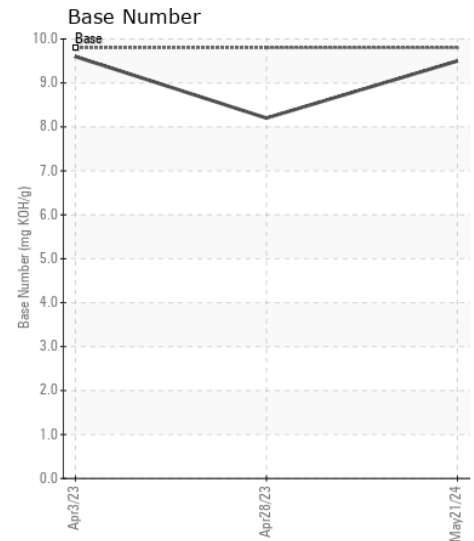
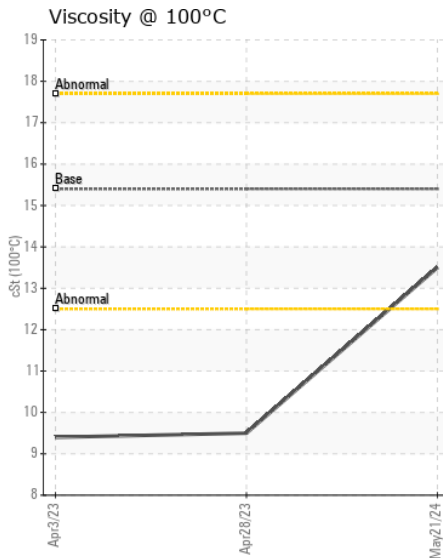
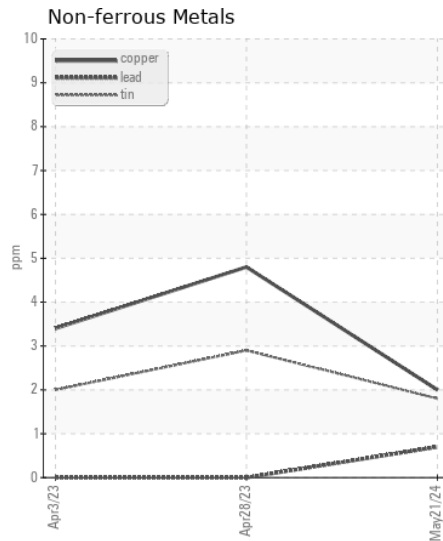
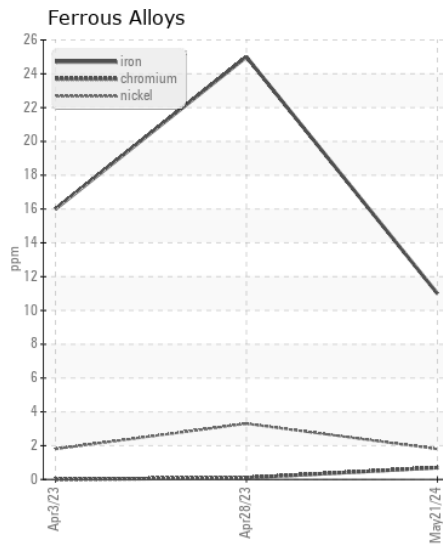
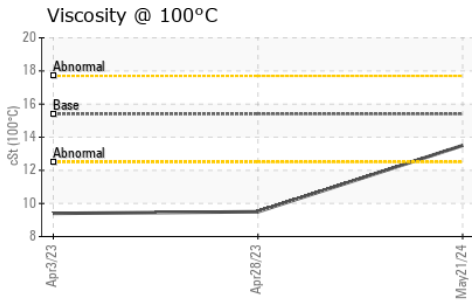
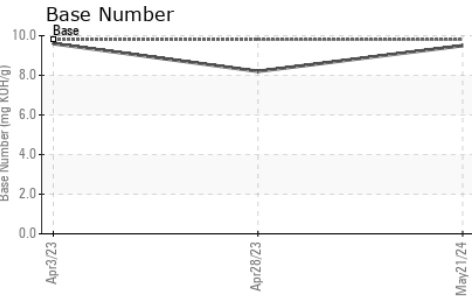
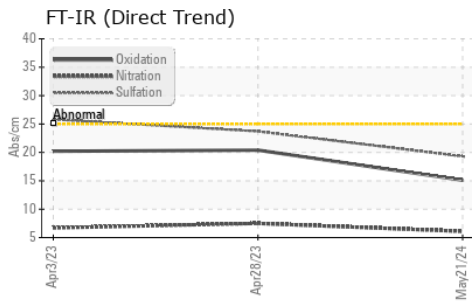
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	35	▲ 116	▲ 113
Potassium	ppm	ASTM D5185m	>20	3	3	2
Fuel		WC Method	>3.0	<1.0	<1.0	0.4
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.1	7.5	6.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.3	23.7	25.8
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	2	2
Boron	ppm	ASTM D5185m	0	102	392	403
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	76	126	121
Manganese	ppm	ASTM D5185m	0	1	4	3
Magnesium	ppm	ASTM D5185m	1010	917	719	654
Calcium	ppm	ASTM D5185m	1070	1203	1566	1490
Phosphorus	ppm	ASTM D5185m	1150	981	721	662
Zinc	ppm	ASTM D5185m	1270	1177	884	802
Sulfur	ppm	ASTM D5185m	2060	3460	2677	2491
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	20.4	20.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.5	8.2	9.6
Visc @ 100°C	cSt	ASTM D445	15.4	13.5	● 9.5	● 9.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0113658
Lab Number : 06189941
Unique Number : 11046693
Test Package : FLEET

Received : 23 May 2024
Tested : 25 May 2024
Diagnosed : 25 May 2024 - Wes Davis

GFL Environmental - 654S - Midlothian
 12230 Deergrove Road
 Midlothian, VA
 US 23112
 Contact: Corbin Umphlet
 cumphlet@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:
F: