



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(YA163853)
Machine Id
10617
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0125713	GFL0118406	GFL0098134
Sample Date		Client Info		16 Jul 2024	21 May 2024	23 Jan 2024
Machine Age	hrs	Client Info		10677	10677	10677
Oil Age	hrs	Client Info		260	100	432
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	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 D5185m	>90	43	26	60
Chromium	ppm	ASTM D5185m	>20	1	<1	2
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	3	4
Lead	ppm	ASTM D5185m	>40	0	1	2
Copper	ppm	ASTM D5185m	>330	15	2	6
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

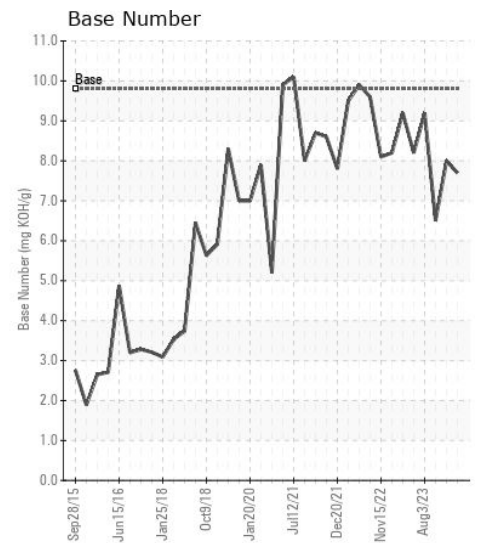
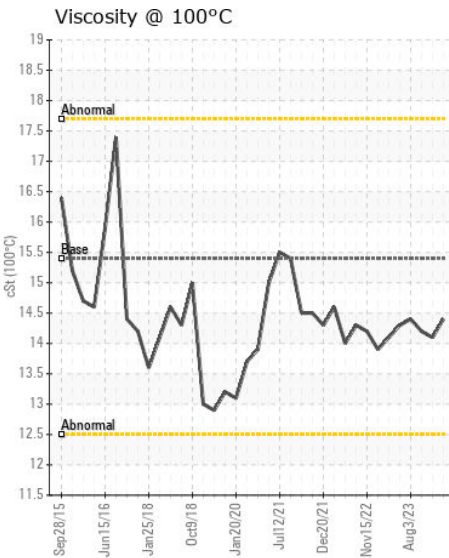
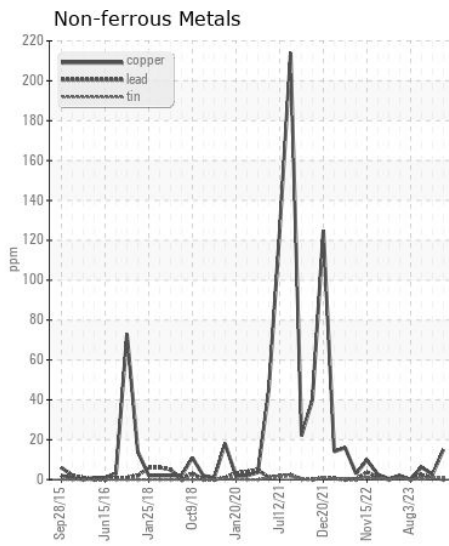
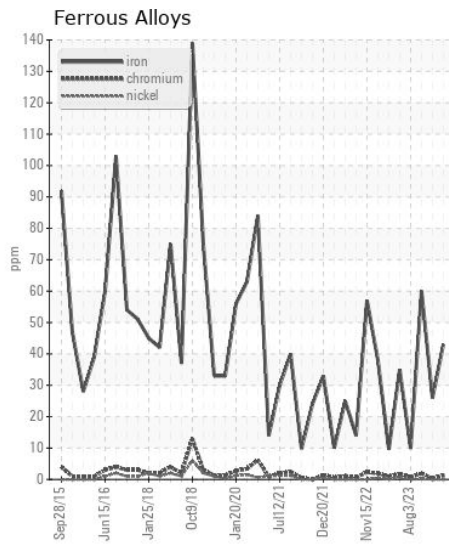
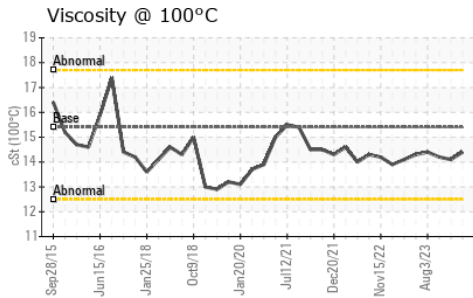
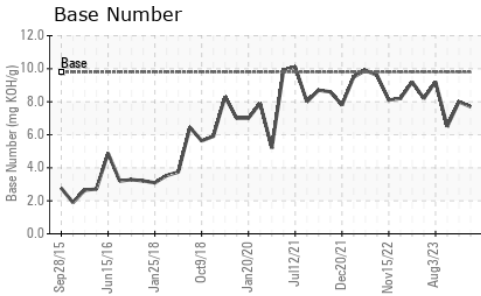
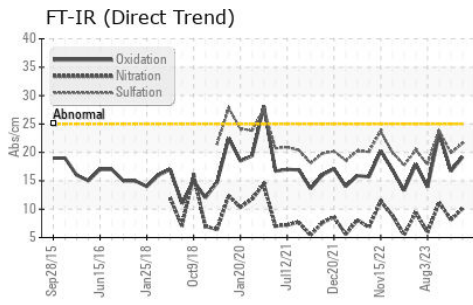
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	6	6
Potassium	ppm	ASTM D5185m	>20	3	3	2
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	>6	0.5	0.3	0.8
Nitration	Abs/cm	*ASTM D7624	>20	10.1	8.1	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	19.9	23.9
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		4	1	2
Boron	ppm	ASTM D5185m	0	4	3	4
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	64	63	62
Manganese	ppm	ASTM D5185m	0	2	<1	<1
Magnesium	ppm	ASTM D5185m	1010	1017	989	1051
Calcium	ppm	ASTM D5185m	1070	1154	1100	1240
Phosphorus	ppm	ASTM D5185m	1150	1089	1056	1060
Zinc	ppm	ASTM D5185m	1270	1396	1289	1382
Sulfur	ppm	ASTM D5185m	2060	3384	3353	2859
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.2	16.7	23.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.7	8.0	6.5
Visc @ 100°C	cSt	ASTM D445	15.4	14.4	14.1	14.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0125713

Lab Number : 06238780

Unique Number : 11127614

Test Package : FLEET

Received : 17 Jul 2024

Tested : 17 Jul 2024

Diagnosed : 17 Jul 2024 - Wes Davis

GFL Environmental - 017 - Durham

148 Stone Park Court

Durham, NC

US 27703

Contact:

bill.waring@wearcheck.com

T: (919)596-1363

F: (919)598-1852

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)