



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(YA117964)

Machine Id

2576

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (40 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0123343	GFL0082417	GFL0082495
Sample Date		Client Info		27 Jun 2024	14 Nov 2023	28 Aug 2023
Machine Age	mls	Client Info		209925	209925	18430
Oil Age	mls	Client Info		0	209925	582
Filter Age	mls	Client Info		0	209925	582
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	7	14	16
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	5	5
Lead	ppm	ASTM D5185m	>40	0	0	1
Copper	ppm	ASTM D5185m	>330	<1	6	6
Tin	ppm	ASTM D5185m	>15	0	0	1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

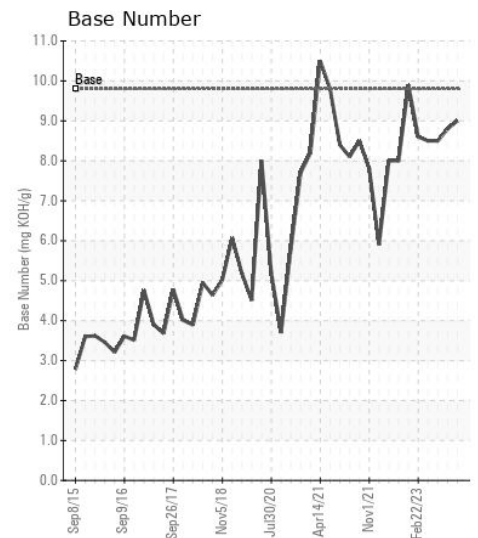
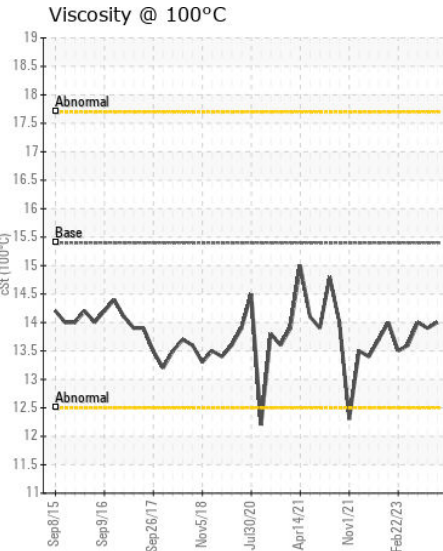
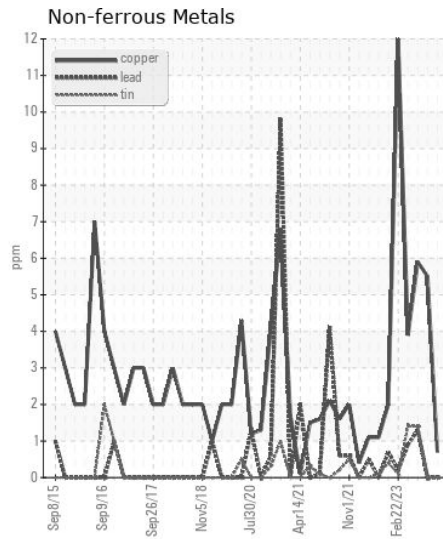
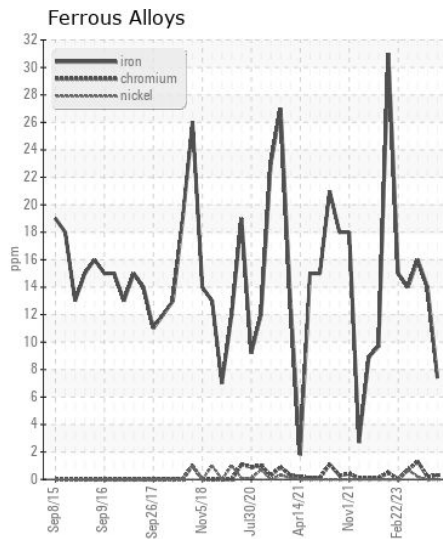
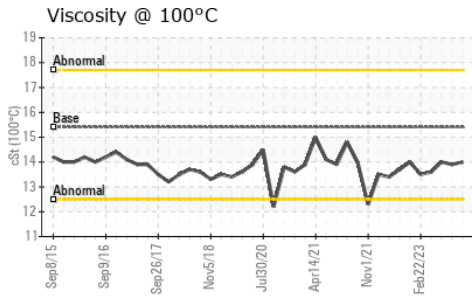
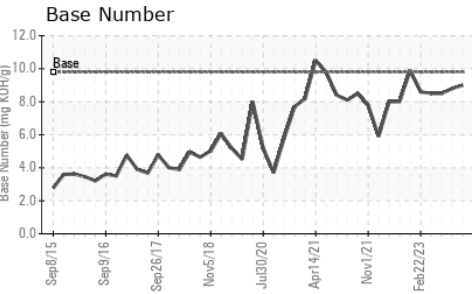
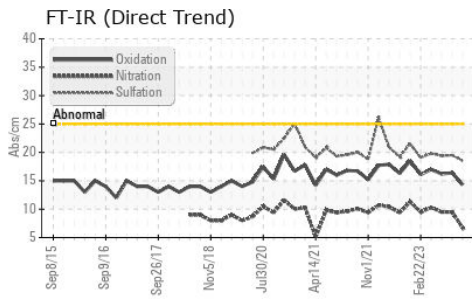
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	3	4	6
Potassium	ppm	ASTM D5185m	>20	4	0	3
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	6.7	9.5	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	19.5	19.4
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	5	2
Boron	ppm	ASTM D5185m	0	9	0	0
Barium	ppm	ASTM D5185m	0	0	0	44
Molybdenum	ppm	ASTM D5185m	60	55	63	57
Manganese	ppm	ASTM D5185m	0	0	<1	1
Magnesium	ppm	ASTM D5185m	1010	884	1023	907
Calcium	ppm	ASTM D5185m	1070	1127	1067	979
Phosphorus	ppm	ASTM D5185m	1150	1007	1039	948
Zinc	ppm	ASTM D5185m	1270	1246	1266	1161
Sulfur	ppm	ASTM D5185m	2060	2871	3048	3220
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	16.4	16.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.0	8.8	8.5
Visc @ 100°C	cSt	ASTM D445	15.4	14.0	13.9	14.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0123343
Lab Number : 06227099
Unique Number : 11110592
Test Package : FLEET

Received : 03 Jul 2024
Tested : 05 Jul 2024
Diagnosed : 05 Jul 2024 - Wes Davis

GFL Environmental - 007 - Brunswick
 2809 Galloway Road
 Bolivia, NC
 US 28422
 Contact: DONALD CRAVEN
 dcraven@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)

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