



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
1107M
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		GFL0092830	GFL0092787	GFL0092746
Sample Date		Client Info		21 Feb 2024	31 Oct 2023	29 Aug 2023
Machine Age	hrs	Client Info		12112	12112	12112
Oil Age	hrs	Client Info		12112	12112	12112
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	N/A	Not Changd
Filter Changed		Client Info		Not Changd	N/A	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	30	44	27
Chromium	ppm	ASTM D5185m	>20	<1	5	4
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>30	4	4	6
Lead	ppm	ASTM D5185m	>30	0	<1	0
Copper	ppm	ASTM D5185m	>30	2	17	10
Tin	ppm	ASTM D5185m	>15	<1	1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

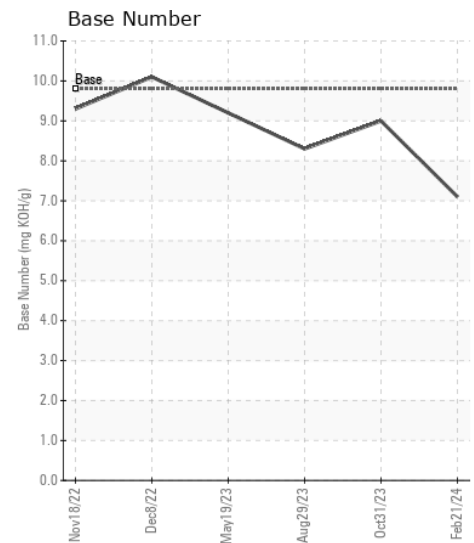
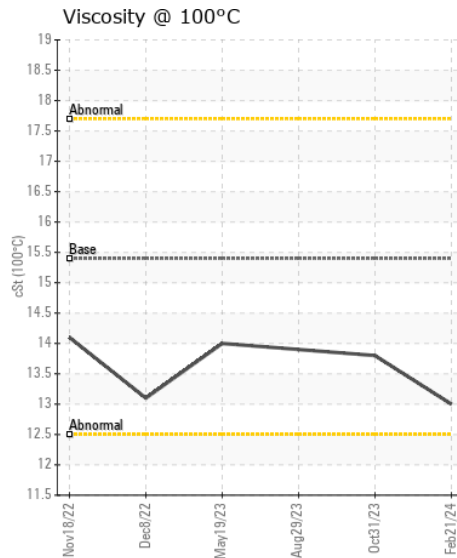
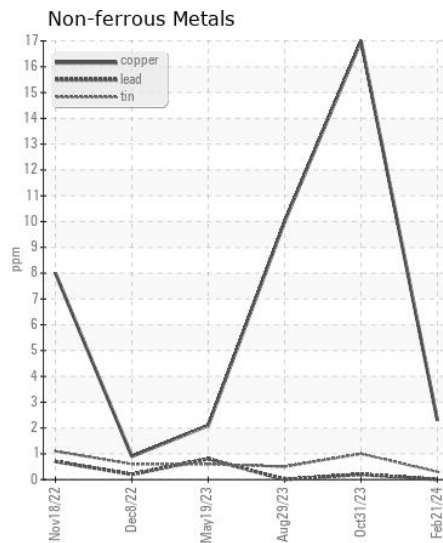
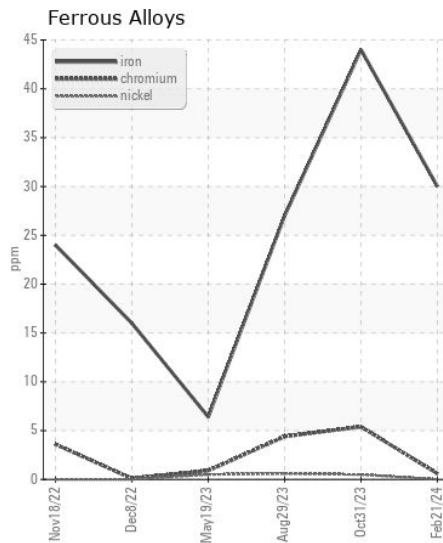
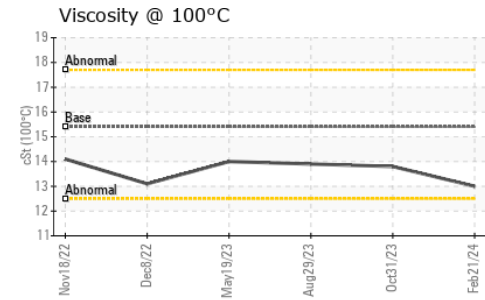
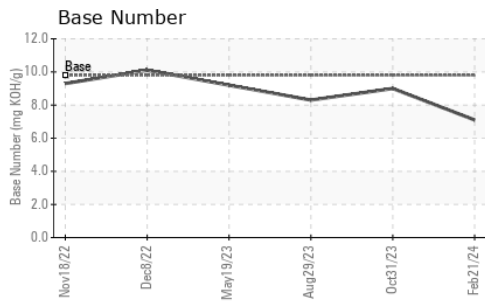
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	5	18	15
Potassium	ppm	ASTM D5185m	>20	7	4	<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	>3	0.5	0.1	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.3	4.6	6.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	17.3	18.3
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		6	0	2
Boron	ppm	ASTM D5185m	0	9	<1	4
Barium	ppm	ASTM D5185m	0	<1	4	0
Molybdenum	ppm	ASTM D5185m	60	66	63	70
Manganese	ppm	ASTM D5185m	0	1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	856	901	1063
Calcium	ppm	ASTM D5185m	1070	1061	1074	1153
Phosphorus	ppm	ASTM D5185m	1150	930	865	1058
Zinc	ppm	ASTM D5185m	1270	1100	1187	1304
Sulfur	ppm	ASTM D5185m	2060	2622	2785	3566
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.1	13.2	13.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.1	9.0	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	13.0	13.8	13.9



Certificate L2367

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

Sample No. : GFL0092830

Lab Number : 06099821

Unique Number : 10898051

Test Package : FLEET

Received : 26 Feb 2024

Tested : 27 Feb 2024

Diagnosed : 27 Feb 2024 - Wes Davis

GFL Environmental - 455 - Flint

2051 W. Bristol Rd

Flint Township, MI

US 48507

Contact: MARK WOMBLE

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F:

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)