



WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL



Machine Id
602M

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (9 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: Resample)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0106707	GFL0106705	GFL0097712
Sample Date		Client Info		22 Feb 2024	14 Feb 2024	02 Nov 2023
Machine Age	hrs	Client Info		14900	14899	14606
Oil Age	hrs	Client Info		0	293	700
Filter Age	hrs	Client Info		0	293	700
Oil Changed		Client Info		Not Chngd	Changed	Changed
Filter Changed		Client Info		Not Chngd	Changed	Changed
Sample Status				MARGINAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	18	13	6
Chromium	ppm	ASTM D5185m	>20	1	<1	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	2	<1	9
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

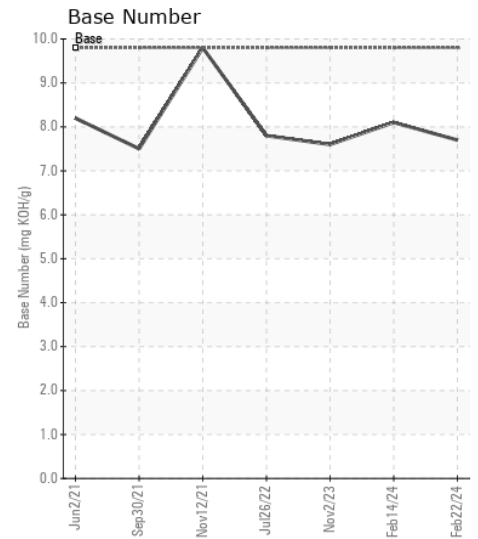
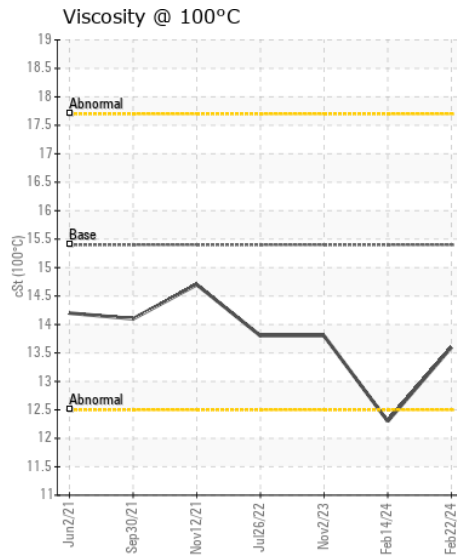
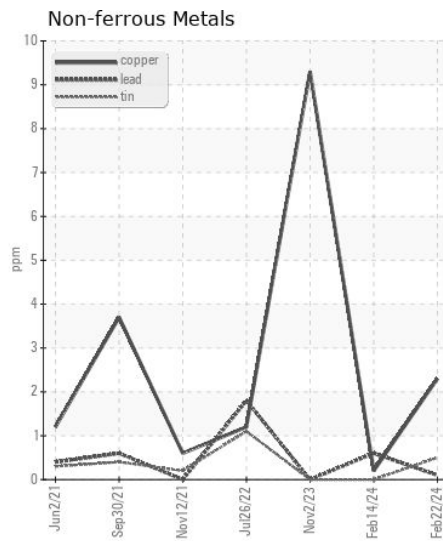
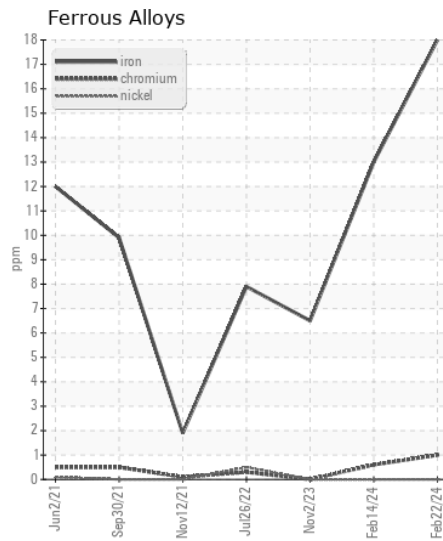
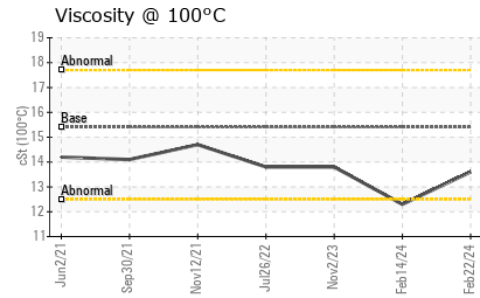
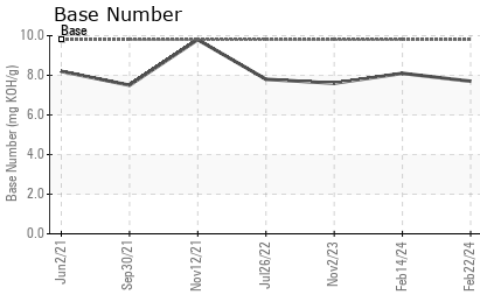
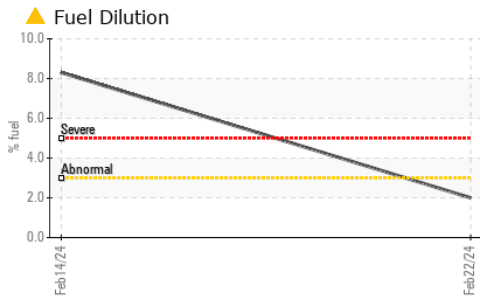
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	3	8	6
Potassium	ppm	ASTM D5185m	>20	2	2	0
Fuel	%	ASTM D3524	>3.0	▲ 2.0	▲ 8.3	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.5	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.9	9.8	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	20.7	19.9
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		4	▲ 202	7
Boron	ppm	ASTM D5185m	0	3	7	4
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	52	64	62
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	849	977	976
Calcium	ppm	ASTM D5185m	1070	908	1000	1111
Phosphorus	ppm	ASTM D5185m	1150	892	1044	972
Zinc	ppm	ASTM D5185m	1270	1187	1258	1253
Sulfur	ppm	ASTM D5185m	2060	2644	3008	2689
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	19.3	15.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.7	8.1	7.6
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	▲ 12.3	13.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0106707 **Received** : 01 Mar 2024
Lab Number : 06105875 **Tested** : 05 Mar 2024
Unique Number : 10909372 **Diagnosed** : 05 Mar 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: PercentFuel)

GFL Environmental - 405 - Arbor Hills
 7400 Napier Rd
 NORTHVILLE, MI
 US 48168
 Contact: Anthony Hopkins
 ahopkins@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: