



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
425061-402314

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		GFL0109791	GFL0103271	GFL0099946
Sample Date		Client Info		27 Feb 2024	26 Jan 2024	29 Nov 2023
Machine Age	hrs	Client Info		25104	24937	24768
Oil Age	hrs	Client Info		0	600	600
Filter Age	hrs	Client Info		0	600	600
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		Not Changd	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	16	39	16
Chromium	ppm	ASTM D5185m	>20	1	1	<1
Nickel	ppm	ASTM D5185m	>4	<1	1	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	13	2
Lead	ppm	ASTM D5185m	>40	1	0	5
Copper	ppm	ASTM D5185m	>330	0	0	1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

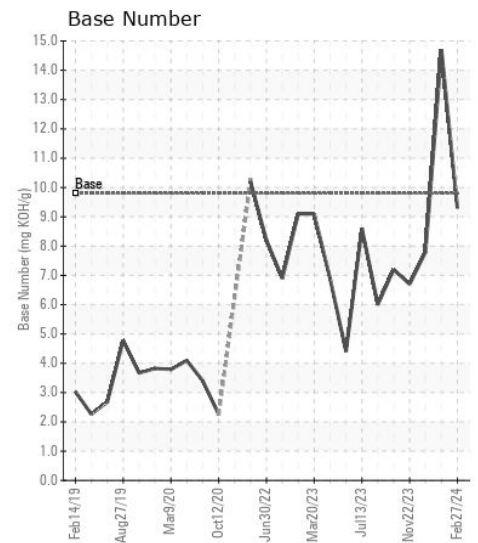
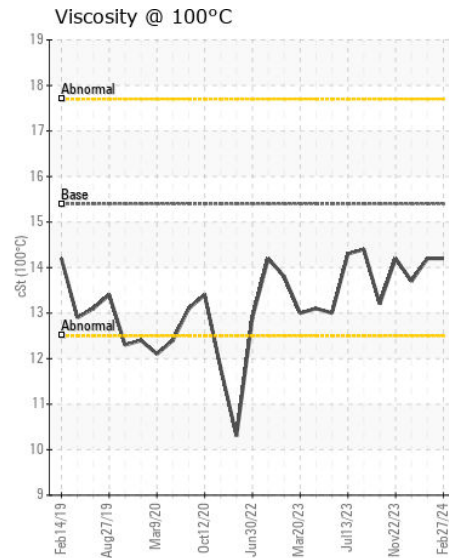
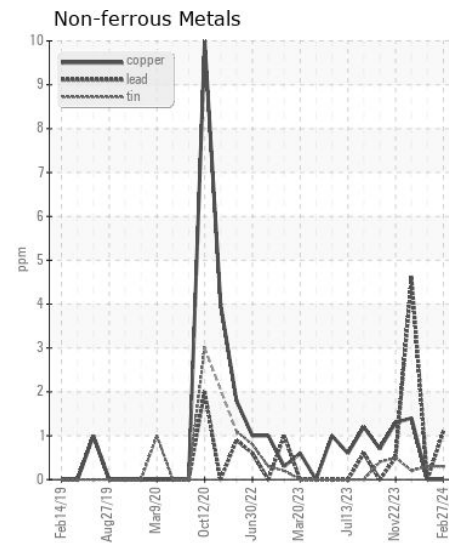
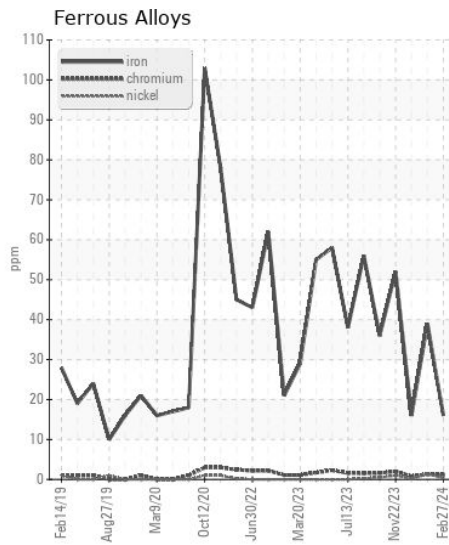
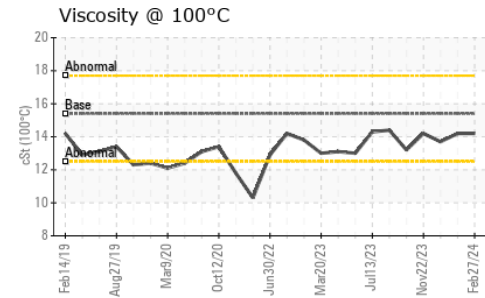
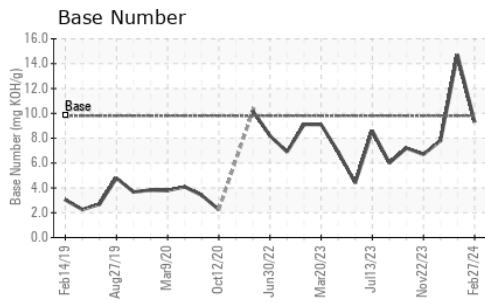
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	3	29	11
Potassium	ppm	ASTM D5185m	>20	<1	8	5
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	1.4	1.7	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.5	14.6	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	22.7	21.3
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		22	1807	4
Boron	ppm	ASTM D5185m	0	8	41	11
Barium	ppm	ASTM D5185m	0	0	<1	2
Molybdenum	ppm	ASTM D5185m	60	59	115	76
Manganese	ppm	ASTM D5185m	0	<1	<1	0
Magnesium	ppm	ASTM D5185m	1010	1042	854	1082
Calcium	ppm	ASTM D5185m	1070	1360	1005	1393
Phosphorus	ppm	ASTM D5185m	1150	1035	958	1215
Zinc	ppm	ASTM D5185m	1270	1454	1187	1474
Sulfur	ppm	ASTM D5185m	2060	3441	2970	4978
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.6	16.2	18.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.3	14.7	7.8
Visc @ 100°C	cSt	ASTM D445	15.4	14.2	14.2	13.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0109791
Lab Number : 06104187
Unique Number : 10902417
Test Package : FLEET

Received : 29 Feb 2024
Tested : 01 Mar 2024
Diagnosed : 01 Mar 2024 - Wes Davis

GFL Environmental - 836 - Kansas City Hauling
 7801 East Truman Road
 Kansas City, MO
 US 64126
 Contact: Loyce Stewart
 loyce.stewart@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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F: