



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**429048-402450**

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		<b>GFL0114034</b>	GFL0109786	GFL0109843
Sample Date		Client Info		<b>18 Mar 2024</b>	26 Feb 2024	19 Feb 2024
Machine Age	hrs	Client Info		<b>0</b>	17441	19371
Oil Age	hrs	Client Info		<b>0</b>	600	600
Filter Age	hrs	Client Info		<b>0</b>	600	600
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	<b>4</b>	18	23
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	3	6
Lead	ppm	ASTM D5185m	>45	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>85	<b>&lt;1</b>	<1	6
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

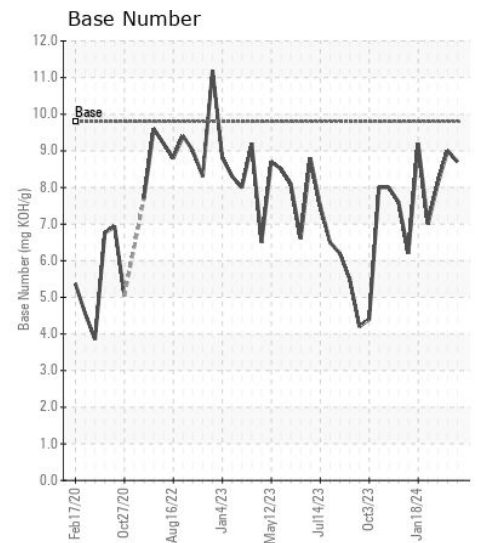
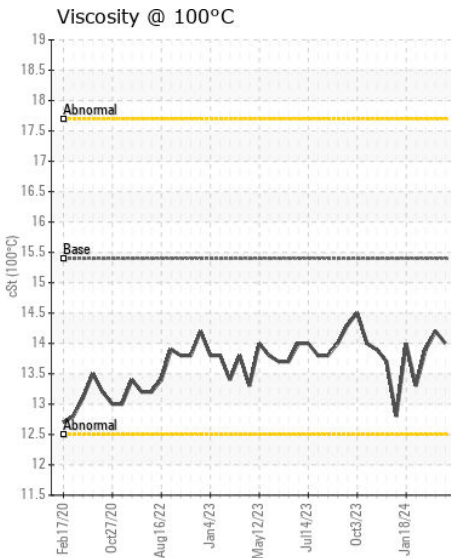
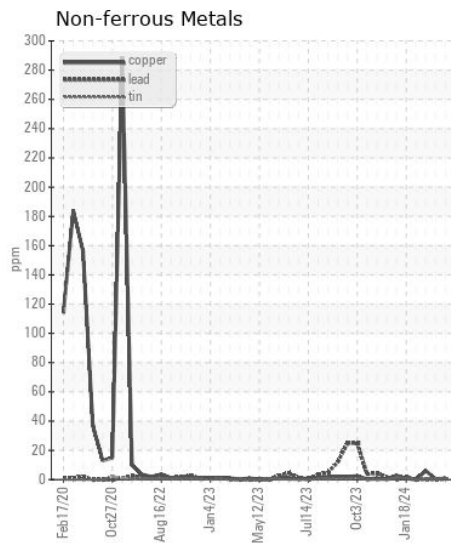
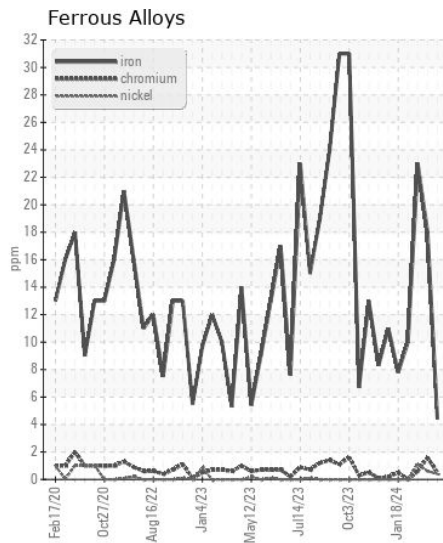
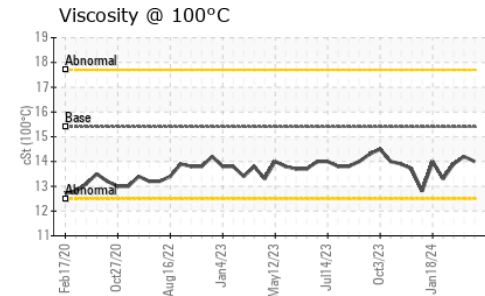
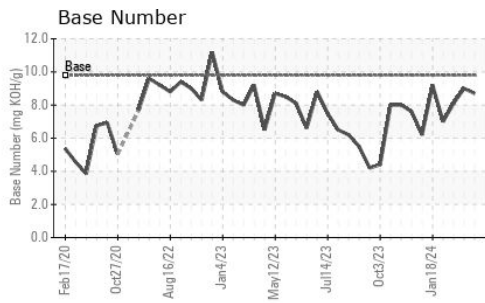
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>8</b>	5	7
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	13
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	1.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.1</b>	8.5	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.0</b>	21.3	19.1
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>2</b>	29	5
Boron	ppm	ASTM D5185m	0	<b>10</b>	8	6
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>55</b>	64	65
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>850</b>	921	985
Calcium	ppm	ASTM D5185m	1070	<b>1167</b>	1210	1161
Phosphorus	ppm	ASTM D5185m	1150	<b>1015</b>	972	1087
Zinc	ppm	ASTM D5185m	1270	<b>1165</b>	1267	1318
Sulfur	ppm	ASTM D5185m	2060	<b>3343</b>	3186	3398
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.3</b>	15.3	15.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.7</b>	9.0	8.1
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.0</b>	14.2	13.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0114034  
**Lab Number** : 06123482  
**Unique Number** : 10937633  
**Test Package** : FLEET

**Received** : 20 Mar 2024  
**Tested** : 21 Mar 2024  
**Diagnosed** : 21 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: