



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

Machine Id  
**422010-406**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (39 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0096504</b>	GFL0090912	GFL0090921
Sample Date		Client Info		<b>26 Feb 2024</b>	23 Oct 2023	18 Sep 2023
Machine Age	hrs	Client Info		<b>14914</b>	14740	14626
Oil Age	hrs	Client Info		<b>174</b>	114	14626
Filter Age	hrs	Client Info		<b>174</b>	114	14626
Oil Changed		Client Info		<b>Not Chngd</b>	N/A	Changed
Filter Changed		Client Info		<b>Not Chngd</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>4</b>	3	10
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	3	7
Lead	ppm	ASTM D5185m	>40	<b>1</b>	<1	2
Copper	ppm	ASTM D5185m	>330	<b>1</b>	<1	2
Tin	ppm	ASTM D5185m	>15	<b>2</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

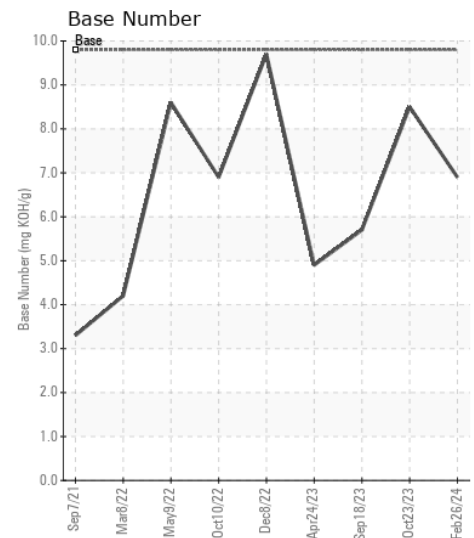
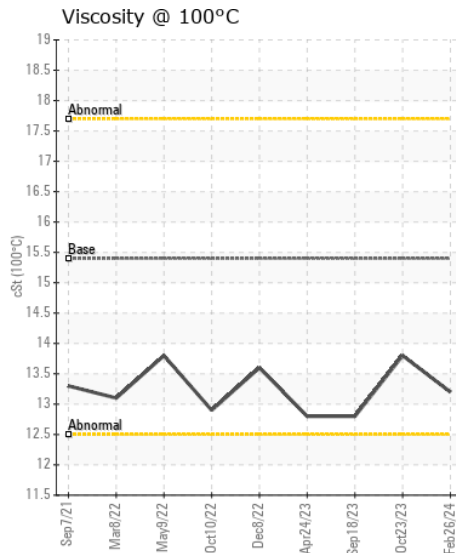
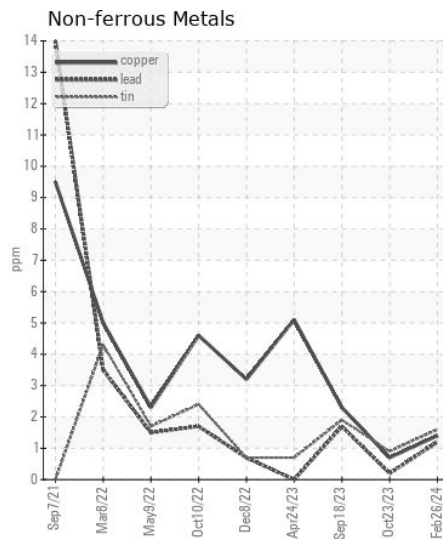
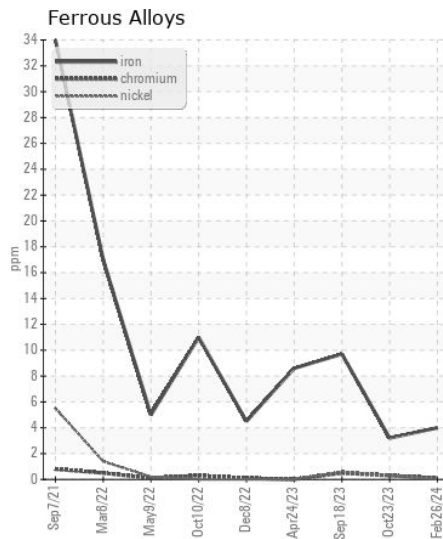
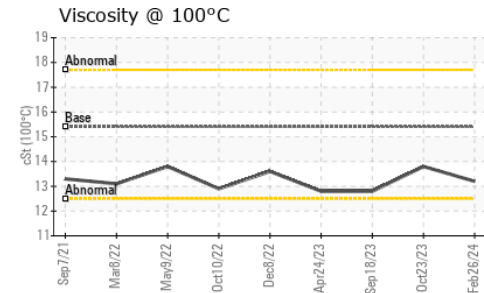
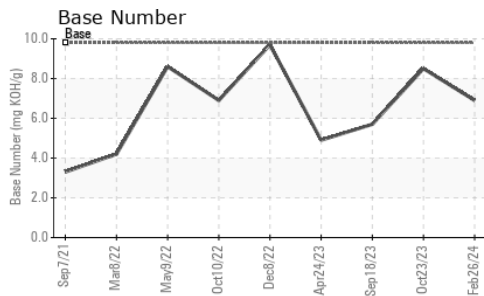
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	5	9
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	4
Fuel		WC Method	>3.0	<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	>4	<b>0.2</b>	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.2</b>	6.4	11.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.7</b>	18.3	24.6
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>3</b>	3	4
Boron	ppm	ASTM D5185m	0	<b>8</b>	9	6
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>55</b>	56	63
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>845</b>	875	939
Calcium	ppm	ASTM D5185m	1070	<b>1005</b>	1026	1144
Phosphorus	ppm	ASTM D5185m	1150	<b>1005</b>	1077	997
Zinc	ppm	ASTM D5185m	1270	<b>1191</b>	1159	1261
Sulfur	ppm	ASTM D5185m	2060	<b>2987</b>	3763	3740
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.5</b>	15.0	19.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.9</b>	8.5	5.7
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.2</b>	13.8	12.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0096504  
**Lab Number** : 06105098  
**Unique Number** : 10903328  
**Test Package** : FLEET

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

**GFL Environmental - 656 - Culpeper Hauling**  
 15490 Montanus Drive  
 Culpeper, VA  
 US 22701  
 Contact: Matt Hanna  
 mhanna@gflenv.com  
 T: (540)727-0887  
 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)