



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

Machine Id  
**413051**  
 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>GFL0104982</b>	GFL0104799	GFL0104807
Sample Date		Client Info		<b>17 May 2024</b>	25 Apr 2024	26 Mar 2024
Machine Age	hrs	Client Info		<b>2382</b>	2213	2074
Oil Age	hrs	Client Info		<b>2074</b>	139	1913
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>4</b>	7	4
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	2
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	<1	2
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<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**

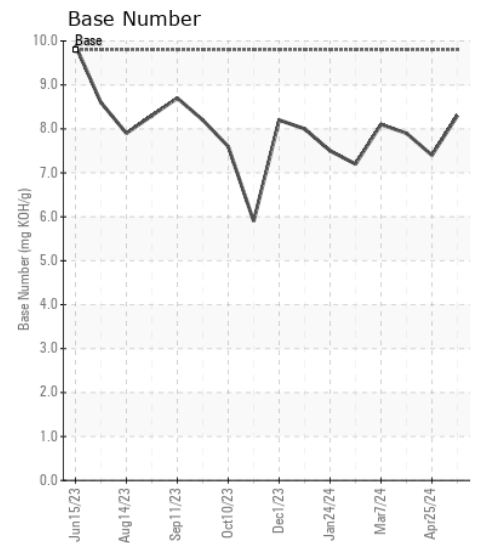
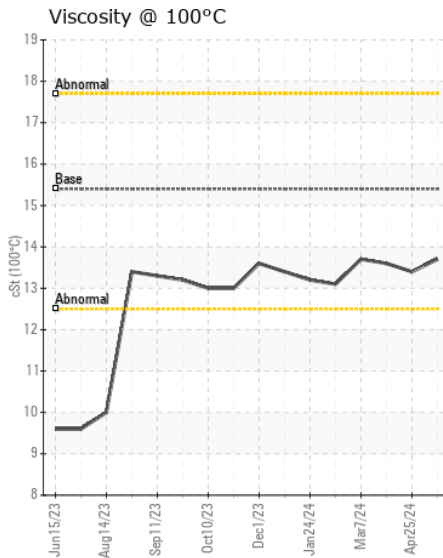
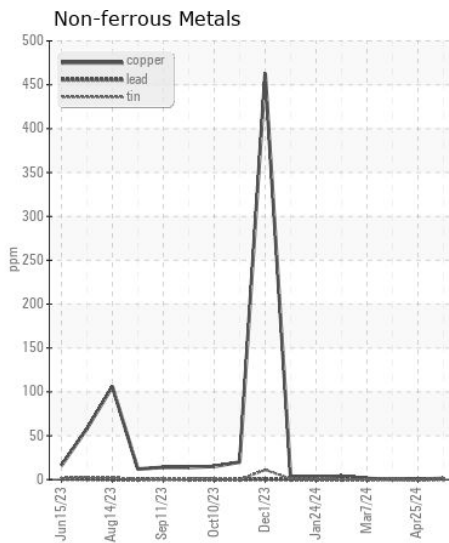
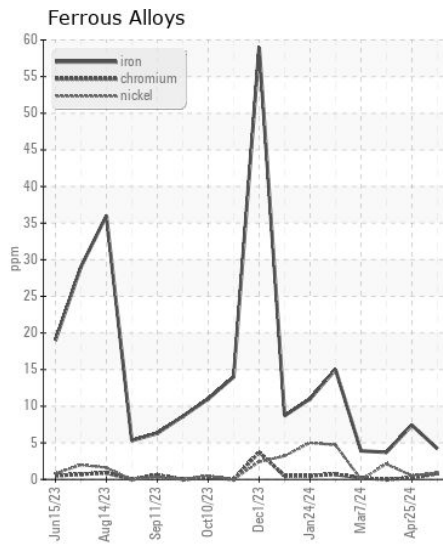
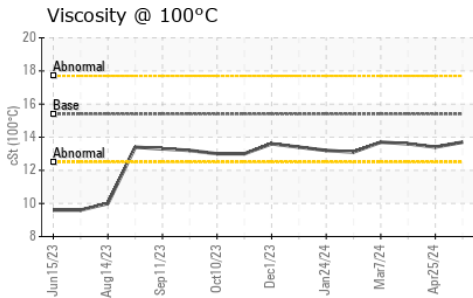
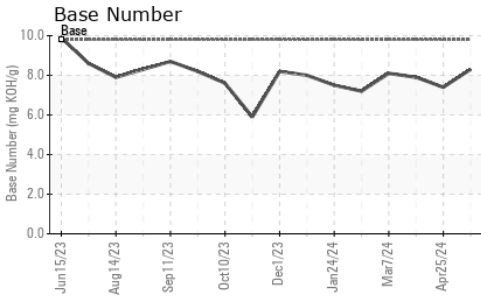
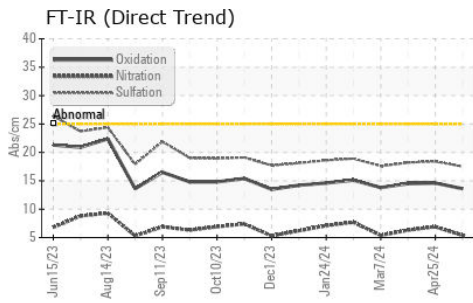
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	3	2
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	<1	4
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>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.4</b>	6.9	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.5</b>	18.4	18.2
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>	2	2
Boron	ppm	ASTM D5185m	0	<b>3</b>	0	2
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>58</b>	56	53
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>924</b>	943	869
Calcium	ppm	ASTM D5185m	1070	<b>1059</b>	1049	966
Phosphorus	ppm	ASTM D5185m	1150	<b>1008</b>	1028	1008
Zinc	ppm	ASTM D5185m	1270	<b>1201</b>	1205	1193
Sulfur	ppm	ASTM D5185m	2060	<b>3241</b>	3440	3453
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.6</b>	14.6	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.3</b>	7.4	7.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.7</b>	13.4	13.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0104982  
**Lab Number** : 06191882  
**Unique Number** : 11048634  
**Test Package** : FLEET

**Received** : 28 May 2024  
**Tested** : 29 May 2024  
**Diagnosed** : 29 May 2024 - Wes Davis

**GFL Environmental - 820 - Joplin Hauling**  
 3700 West 7th Street  
 Joplin, MO  
 US 64801

Contact: James Jarrett  
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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)