



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



Area  
**(50032Z)**  
Machine Id  
**412059**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (11 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0107471</b>	GFL0107494	GFL0107500
Sample Date		Client Info		<b>27 Jun 2024</b>	14 Mar 2024	17 Jan 2024
Machine Age	hrs	Client Info		<b>5224</b>	4516	4056
Oil Age	hrs	Client Info		<b>708</b>	609	310
Filter Age	hrs	Client Info		<b>708</b>	609	310
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>13</b>	12	1
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	4	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>1</b>	3	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	0
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**

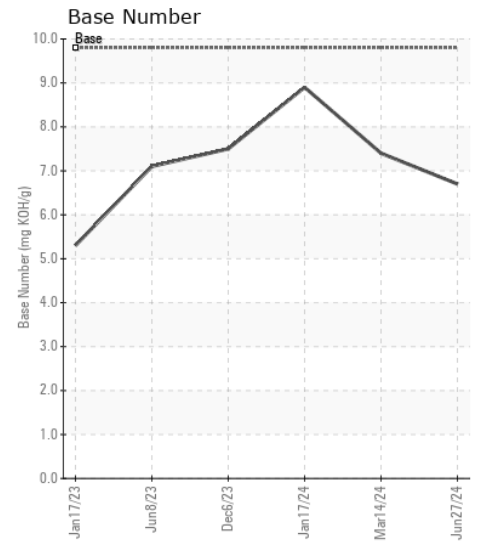
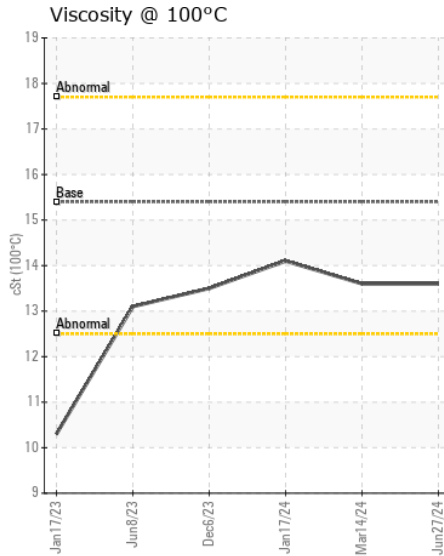
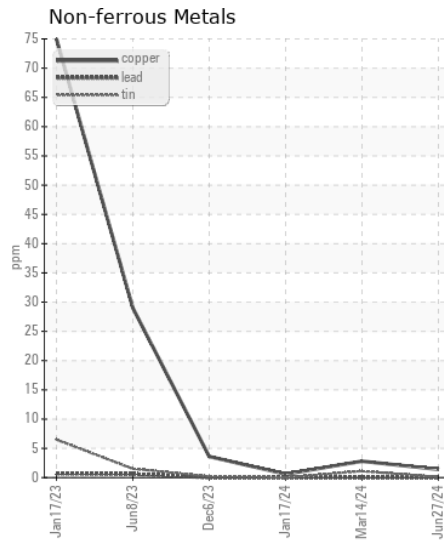
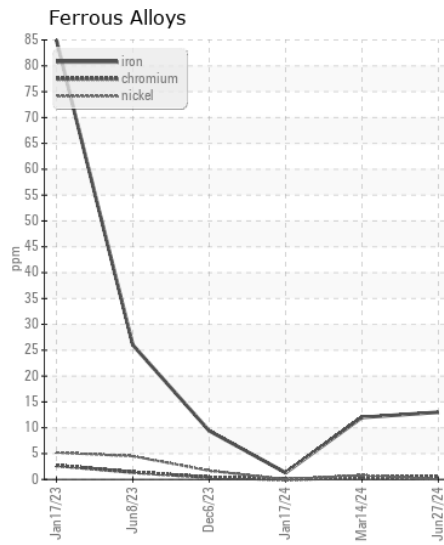
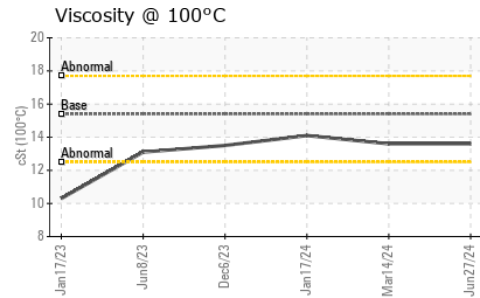
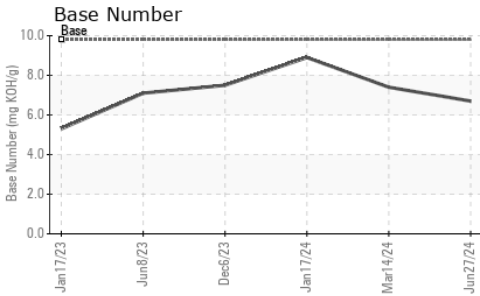
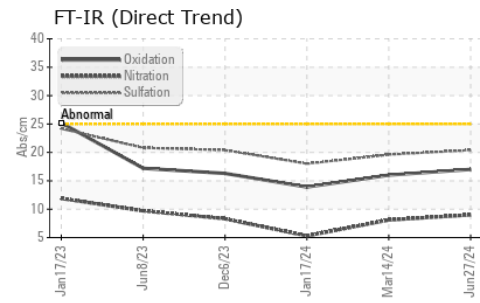
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	5	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	6	<1
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>0.5</b>	0.4	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.0</b>	8.1	5.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.4</b>	19.6	18.0
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>5</b>	1	<1
Boron	ppm	ASTM D5185m	0	<b>10</b>	15	31
Barium	ppm	ASTM D5185m	0	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m	60	<b>64</b>	67	59
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>933</b>	907	855
Calcium	ppm	ASTM D5185m	1070	<b>1192</b>	1242	1025
Phosphorus	ppm	ASTM D5185m	1150	<b>996</b>	939	892
Zinc	ppm	ASTM D5185m	1270	<b>1204</b>	1205	1154
Sulfur	ppm	ASTM D5185m	2060	<b>3056</b>	3069	2958
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.0</b>	16.0	13.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.7</b>	7.4	8.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.6</b>	13.6	14.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0107471  
**Lab Number** : 06229437  
**Unique Number** : 11112930  
**Test Package** : FLEET

**Received** : 05 Jul 2024  
**Tested** : 09 Jul 2024  
**Diagnosed** : 09 Jul 2024 - Wes Davis

**GFL Environmental - 912 - Fort Atkinson HC**  
 1215 Klement St.  
 Fort Atkinson, WI  
 US 53538  
 Contact: LEONARD KOZLEUCHAR  
 leonard.kozleuchar@gflenv.com  
 T: (262)210-6528  
 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)