



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



Machine Id  
**928035**  
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>GFL0125446</b>	GFL0116149	GFL0104581
Sample Date		Client Info		<b>28 Jun 2024</b>	06 May 2024	18 Dec 2023
Machine Age	hrs	Client Info		<b>35897</b>	35681	35049
Oil Age	hrs	Client Info		<b>216</b>	596	501
Filter Age	hrs	Client Info		<b>216</b>	596	501
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>11</b>	23	3
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	3	<1
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m	>330	<b>1</b>	2	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

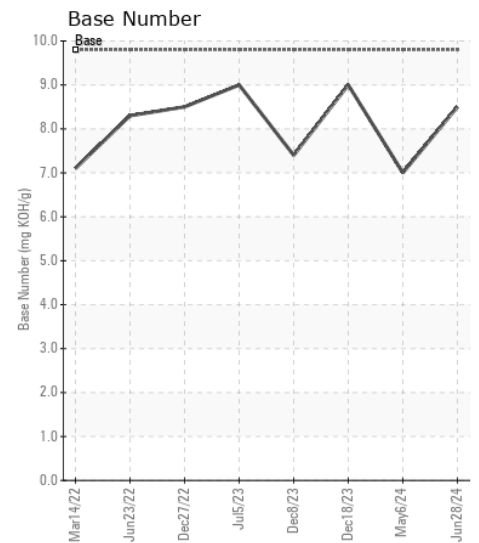
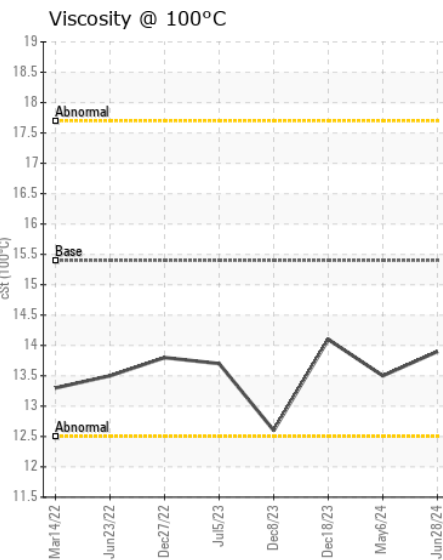
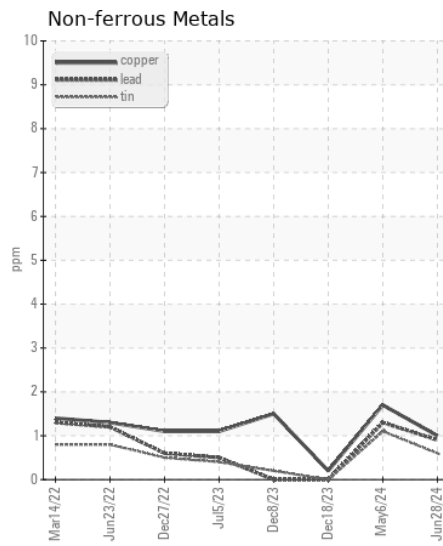
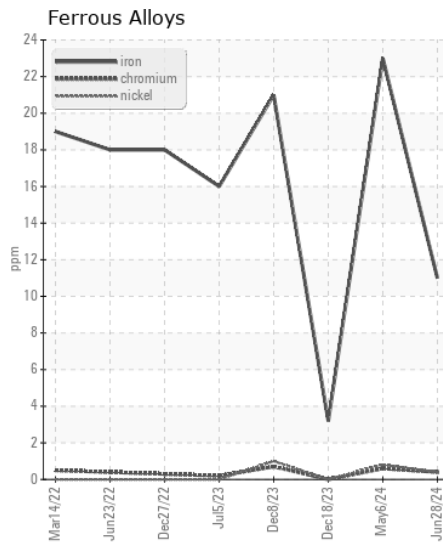
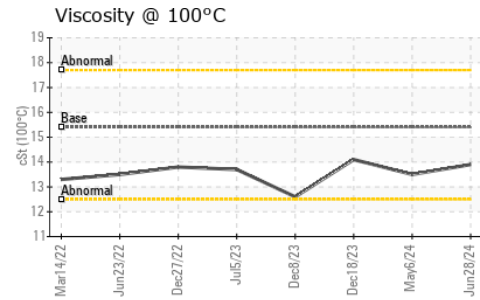
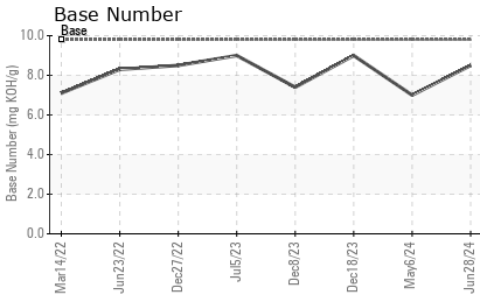
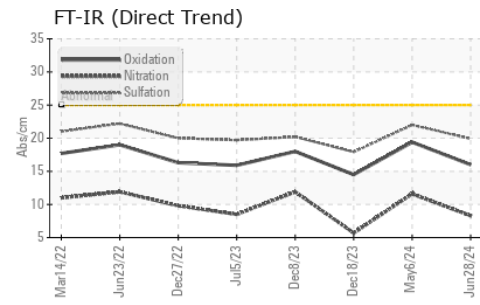
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	7	4
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	4	0
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>0.4</b>	0.7	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.3</b>	11.6	5.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.9</b>	22.0	17.9
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>	2	2
Boron	ppm	ASTM D5185m	0	<b>2</b>	1	1
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	2	0
Molybdenum	ppm	ASTM D5185m	60	<b>63</b>	65	54
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>923</b>	937	935
Calcium	ppm	ASTM D5185m	1070	<b>1078</b>	1081	1061
Phosphorus	ppm	ASTM D5185m	1150	<b>969</b>	1080	952
Zinc	ppm	ASTM D5185m	1270	<b>1176</b>	1214	1191
Sulfur	ppm	ASTM D5185m	2060	<b>2608</b>	3131	2873
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.0</b>	19.4	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.5</b>	7.0	9.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.9</b>	13.5	14.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0125446  
**Lab Number** : 06226071  
**Unique Number** : 11109564  
**Test Package** : FLEET

**Received** : 02 Jul 2024  
**Tested** : 03 Jul 2024  
**Diagnosed** : 03 Jul 2024 - Wes Davis

**GFL Environmental - 935 - Omro HC**  
 250 Alder Avenue  
 Omro, WI  
 US 54963  
 Contact: Tim Kieffer  
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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)