



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

Machine Id  
**429044-402387**  
 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>GFL0115809</b>	GFL0121428	GFL0121419
Sample Date		Client Info		<b>25 Jun 2024</b>	31 May 2024	16 May 2024
Machine Age	hrs	Client Info		<b>14085</b>	13947	13808
Oil Age	hrs	Client Info		<b>138</b>	1101	962
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	<b>33</b>	15	13
Chromium	ppm	ASTM D5185m	>4	<b>2</b>	<1	0
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>10</b>	3	<1
Lead	ppm	ASTM D5185m	>45	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m	>85	<b>15</b>	1	<1
Tin	ppm	ASTM D5185m	>4	<b>1</b>	<1	0
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**

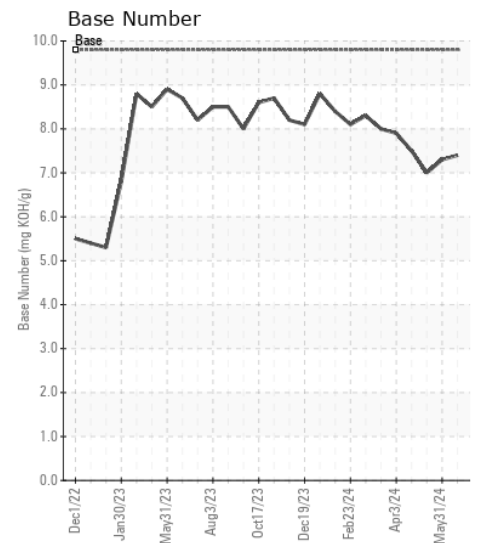
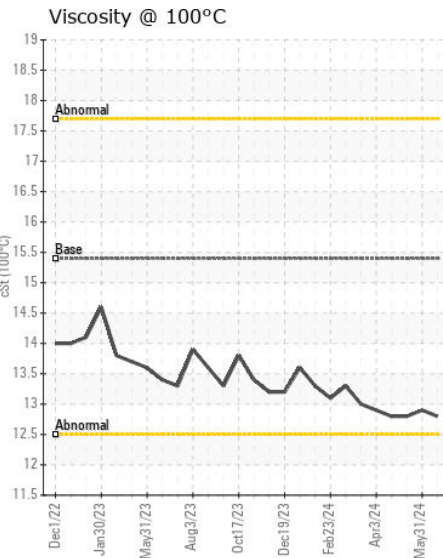
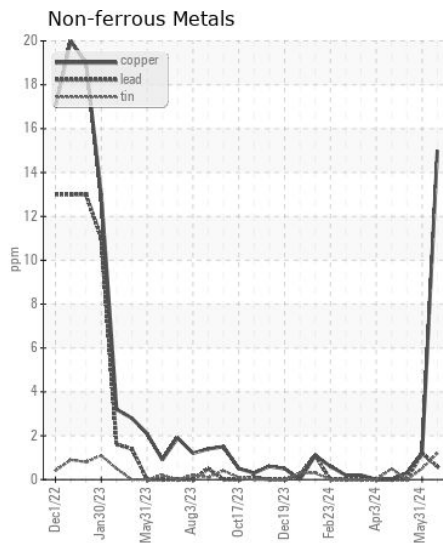
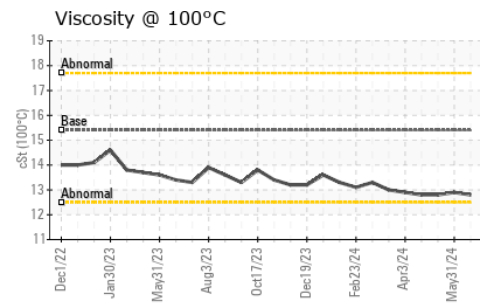
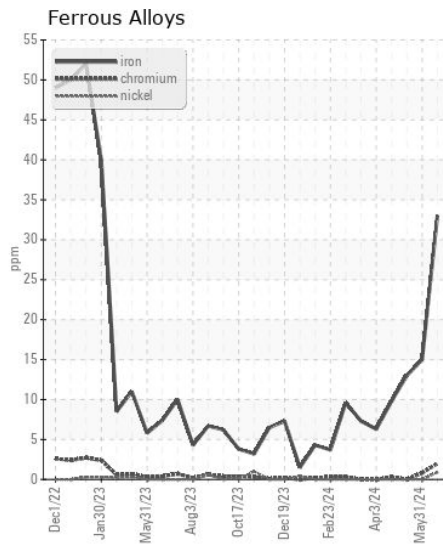
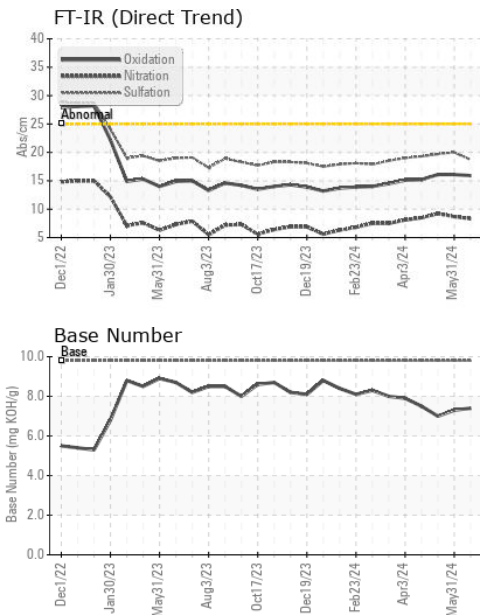
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>16</b>	7	5
Potassium	ppm	ASTM D5185m	>20	<b>23</b>	4	<1
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>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.3</b>	8.7	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.7</b>	20.0	19.7
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>	6	6
Boron	ppm	ASTM D5185m	0	<b>6</b>	6	<1
Barium	ppm	ASTM D5185m	0	<b>2</b>	<1	0
Molybdenum	ppm	ASTM D5185m	60	<b>70</b>	67	69
Manganese	ppm	ASTM D5185m	0	<b>2</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>919</b>	930	956
Calcium	ppm	ASTM D5185m	1070	<b>1169</b>	1080	1157
Phosphorus	ppm	ASTM D5185m	1150	<b>984</b>	1070	1061
Zinc	ppm	ASTM D5185m	1270	<b>1239</b>	1268	1283
Sulfur	ppm	ASTM D5185m	2060	<b>2868</b>	3328	3259
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.9</b>	16.1	16.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.4</b>	7.3	7.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.8</b>	12.9	12.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0115809  
**Lab Number** : 06223123  
**Unique Number** : 11101320  
**Test Package** : FLEET

**Received** : 28 Jun 2024  
**Tested** : 28 Jun 2024  
**Diagnosed** : 28 Jun 2024 - Wes Davis

GFL Environmental - 868 - Childersburg Fines Hauling (Alpine)  
 13737 Plant Rd  
 Childersburg, AL  
 US 35044

Contact: JONATHAN WILLIAMS  
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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)

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F: