



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

Machine Id  
**725014-584**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON HP 15W40 (--- GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: Sample only, out of service )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0116295</b>	GFL0101658	GFL0101628
Sample Date		Client Info		<b>21 May 2024</b>	14 Mar 2024	29 Feb 2024
Machine Age	hrs	Client Info		<b>10209</b>	10209	10209
Oil Age	hrs	Client Info		<b>236</b>	236	236
Filter Age	hrs	Client Info		<b>326</b>	236	236
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

**WEAR**

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>100	<b>▲ 105</b>	▲ 103	▲ 105
Chromium	ppm	ASTM D5185m	>20	<b>6</b>	6	6
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>10</b>	9	10
Lead	ppm	ASTM D5185m	>40	<b>8</b>	7	9
Copper	ppm	ASTM D5185m	>330	<b>2</b>	3	3
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
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**

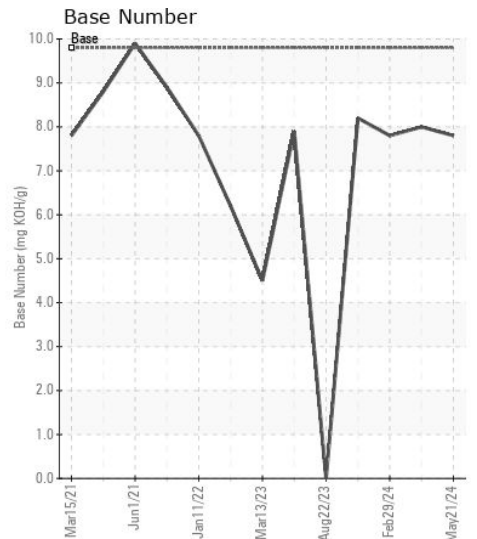
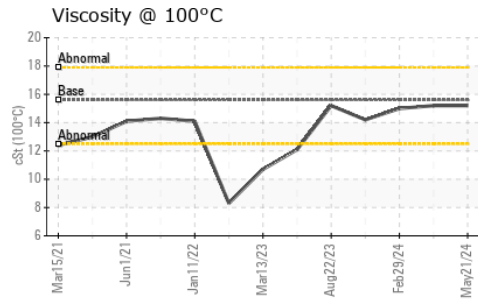
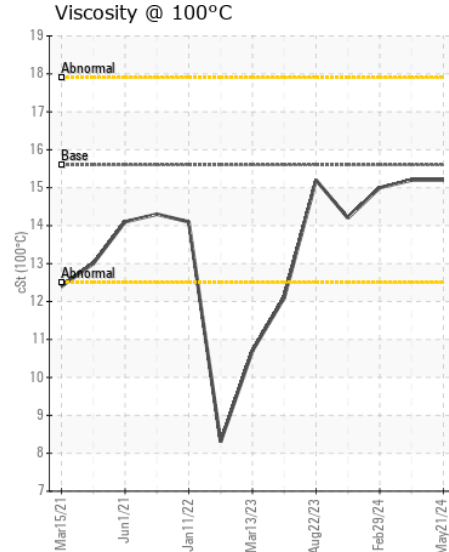
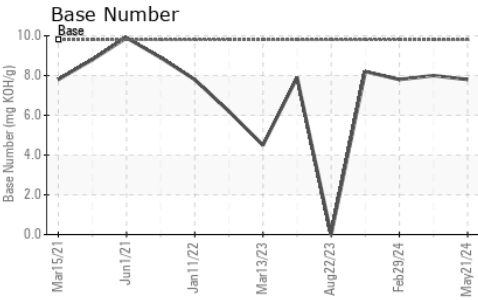
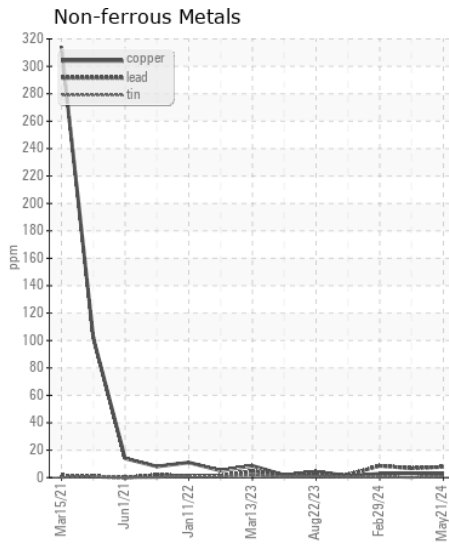
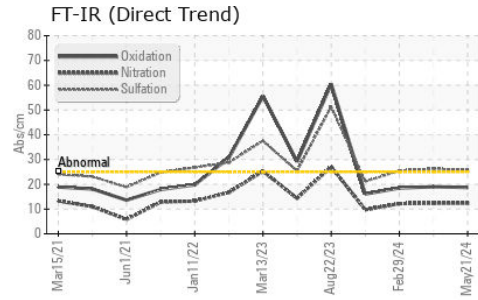
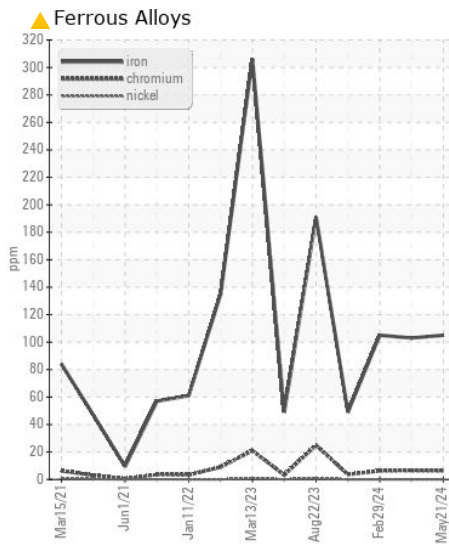
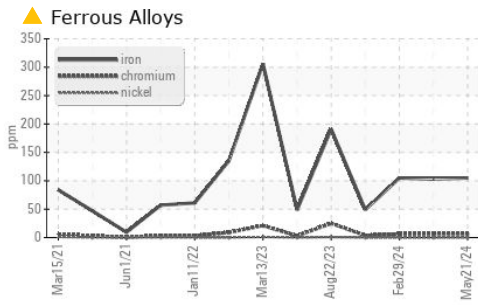
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>8</b>	7	8
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<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>2.9</b>	2.9	2.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.4</b>	12.4	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.7</b>	26.3	25.5
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>4</b>	5	4
Boron	ppm	ASTM D5185m		<b>7</b>	6	4
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>70</b>	70	69
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>988</b>	987	1134
Calcium	ppm	ASTM D5185m		<b>1416</b>	1402	1566
Phosphorus	ppm	ASTM D5185m		<b>1146</b>	1092	1222
Zinc	ppm	ASTM D5185m		<b>1371</b>	1316	1505
Sulfur	ppm	ASTM D5185m		<b>3330</b>	3400	3347
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.7</b>	19.0	18.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.8</b>	8.0	7.8
Visc @ 100°C	cSt	ASTM D445	15.6	<b>15.2</b>	15.2	15.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0116295  
**Lab Number** : 06191700  
**Unique Number** : 11048452  
**Test Package** : FLEET

**Received** : 24 May 2024  
**Tested** : 29 May 2024  
**Diagnosed** : 29 May 2024 - Angela Borella

**GFL Environmental - 626 - Cadillac Hauling**  
 1501 Ron Wilson St  
 Cadillac, MI  
 US 49601  
 Contact: GARY BREWER  
 gbrewerjr@gflenv.com

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: