



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



Area  
**(MR3003)**  
Machine Id  
**FREIGHTLINER 10545C**  
Component  
**Natural Gas Engine**  
Fluid  
**PETRO CANADA DURON GEO LD 15W40 (9 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0109644</b>	GFL0109660	GFL0087455
Sample Date		Client Info		<b>11 Jun 2024</b>	06 Mar 2024	03 Jan 2024
Machine Age	hrs	Client Info		<b>23909</b>	23479	22929
Oil Age	hrs	Client Info		<b>1528</b>	1098	548
Filter Age	hrs	Client Info		<b>1528</b>	1098	548
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>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>10</b>	23	15
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	2	2
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>4</b>	7	6
Lead	ppm	ASTM D5185m	>30	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>35	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	<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**

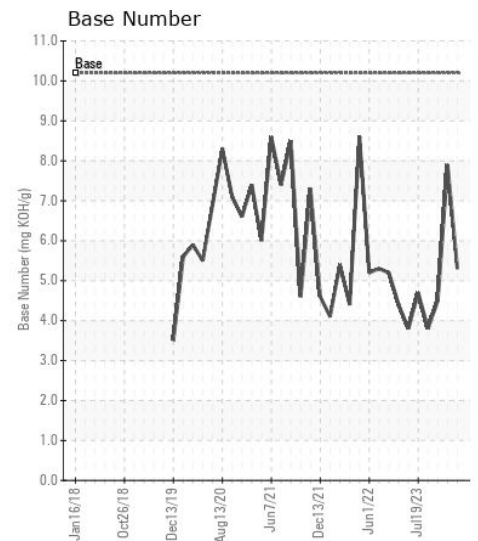
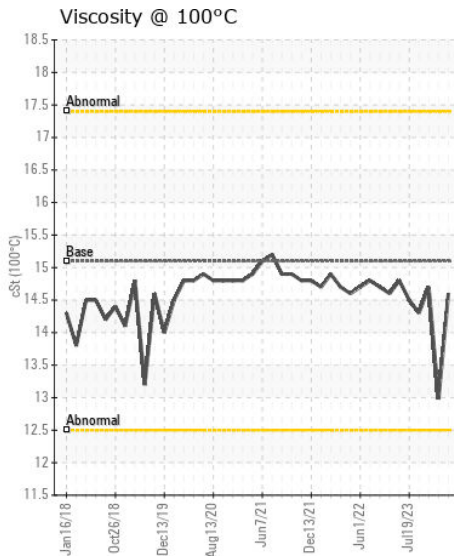
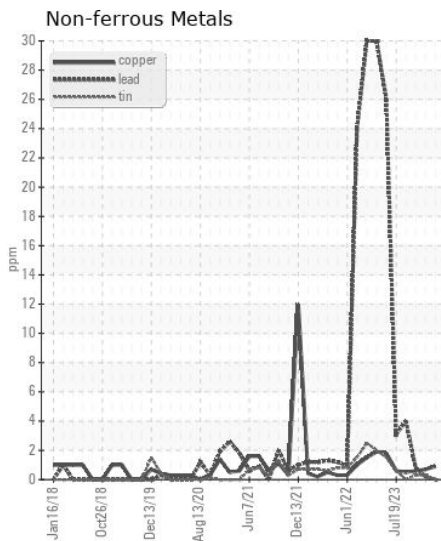
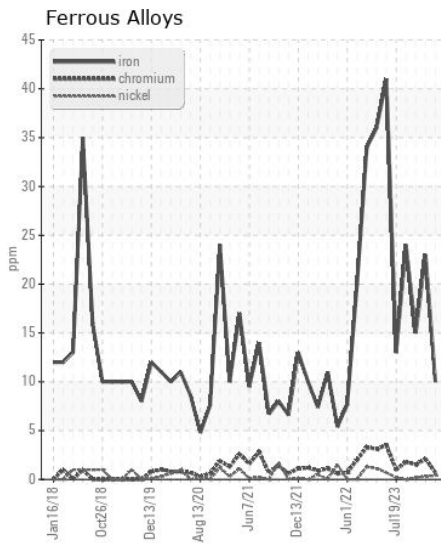
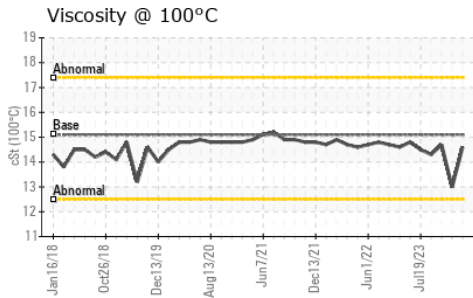
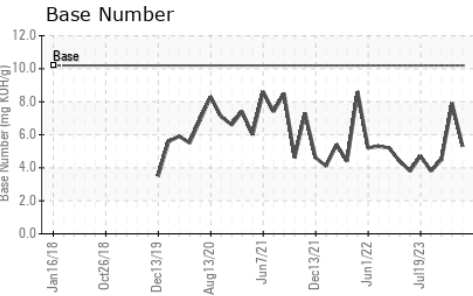
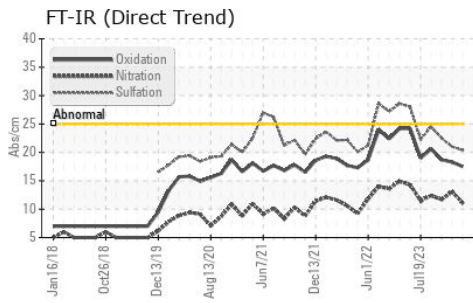
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	<b>3</b>	7	3
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.1</b>	13.1	11.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.4</b>	21.0	22.5
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	>0.1	<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>7</b>	9	7
Boron	ppm	ASTM D5185m	50	<b>13</b>	16	14
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>47</b>	59	55
Manganese	ppm	ASTM D5185m	0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	560	<b>535</b>	628	592
Calcium	ppm	ASTM D5185m	1510	<b>1494</b>	1765	1637
Phosphorus	ppm	ASTM D5185m	780	<b>682</b>	855	745
Zinc	ppm	ASTM D5185m	870	<b>899</b>	1025	1030
Sulfur	ppm	ASTM D5185m	2040	<b>2604</b>	2523	2486
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.5</b>	18.3	18.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>5.3</b>	7.9	4.5
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.6</b>	12.98	14.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109644  
**Lab Number** : 06211277  
**Unique Number** : 11084141  
**Test Package** : FLEET

**Received** : 17 Jun 2024  
**Tested** : 18 Jun 2024  
**Diagnosed** : 18 Jun 2024 - Wes Davis

**GFL Environmental - 331 - Columbus**  
 180 Ada Moore Rd  
 Columbus, NC  
 US 28722

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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)