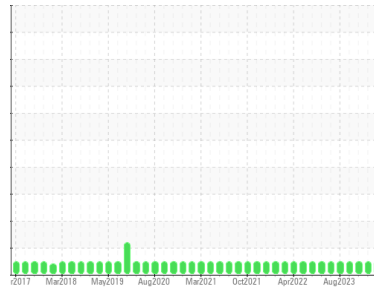




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(MM8729)**  
 Machine Id  
**FREIGHTLINER 10546C**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 15W40 (9 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### 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.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0109647</b>	GFL0087477	GFL0087460
Sample Date	Client Info		<b>14 Jun 2024</b>	19 Jan 2024	11 Oct 2023
Machine Age	hrs	Client Info	<b>9436</b>	8585	8050
Oil Age	hrs	Client Info	<b>1386</b>	535	1177
Oil Changed	Client Info		<b>Changed</b>	N/A	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>12</b>	6	16
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
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 >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>7</b>	4	3
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m >35	<b>2</b>	1	2
Tin	ppm	ASTM D5185m >4	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>12</b>	18	11
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>52</b>	50	64
Manganese	ppm	ASTM D5185m 0	<b>1</b>	0	0
Magnesium	ppm	ASTM D5185m 560	<b>586</b>	601	631
Calcium	ppm	ASTM D5185m 1510	<b>1647</b>	1558	1736
Phosphorus	ppm	ASTM D5185m 780	<b>722</b>	810	765
Zinc	ppm	ASTM D5185m 870	<b>984</b>	1011	1092
Sulfur	ppm	ASTM D5185m 2040	<b>2667</b>	2579	2459

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>4</b>	3	5
Sodium	ppm	ASTM D5185m	<b>7</b>	5	6
Potassium	ppm	ASTM D5185m >20	<b>5</b>	2	1

## INFRA-RED

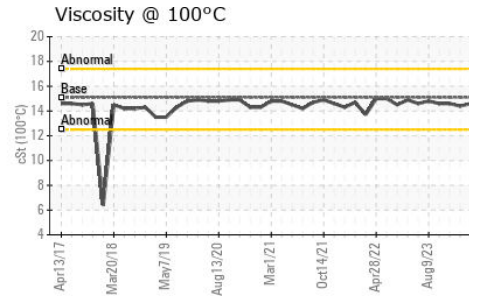
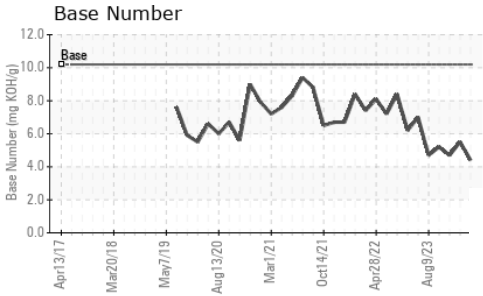
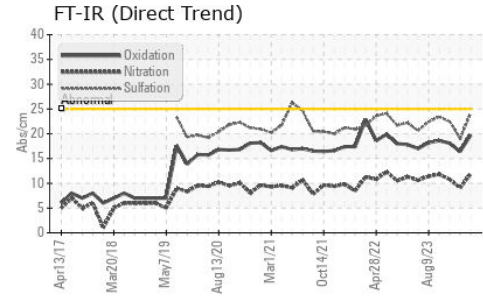
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.9</b>	9.1	10.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>24.1</b>	19.0	22.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.7</b>	16.4	18.1
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>4.4</b>	5.5	4.7



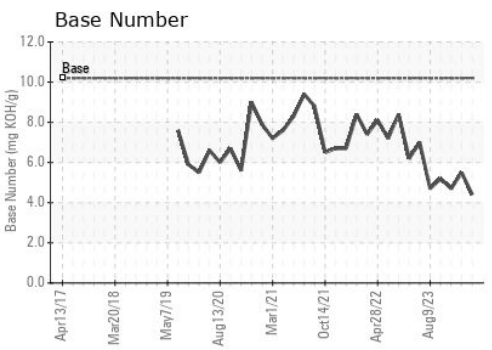
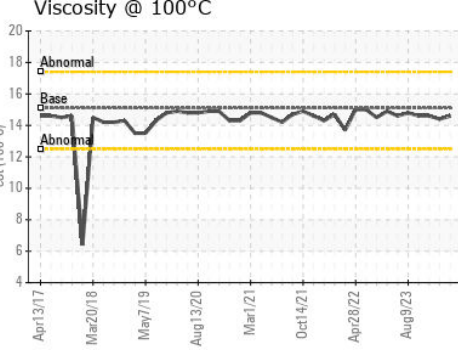
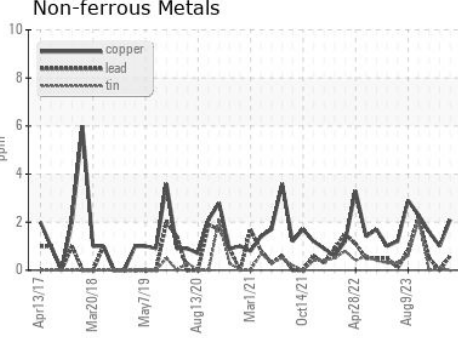
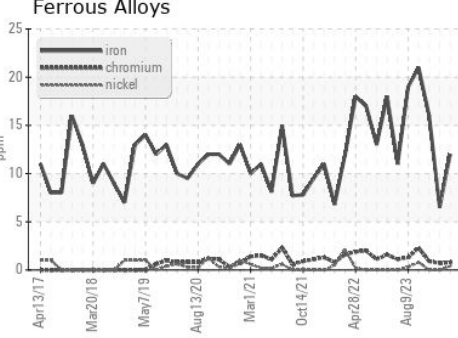
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.6</b>	14.4	14.6

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109647  
**Lab Number** : **06211274**  
**Unique Number** : 11084138  
**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  
 Contact: Matt Segars  
 matt.segars@gflenv.com  
 T: (800)207-6618  
 F: (252)617-2494

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)