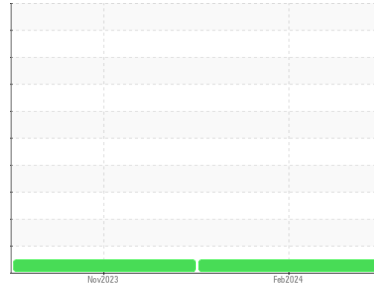




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**823030 PETERBILT 320**  
 Component  
**Diesel Engine**  
 Fluid  
**TIER ONE 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: Sampled only )

### 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>GFL0061431</b>	GFL0102206	---
Sample Date	Client Info	<b>26 Feb 2024</b>	14 Nov 2023	---
Machine Age	hrs	Client Info	<b>8490</b>	0
Oil Age	hrs	Client Info	<b>337</b>	600
Oil Changed	Client Info	<b>Not Changed</b>	Changed	---
Sample Status		<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	---
Water	WC Method >0.2	<b>NEG</b>	NEG	---
Glycol	WC Method	<b>NEG</b>	NEG	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >110	<b>11</b>	11	---
Chromium	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	---
Nickel	ppm ASTM D5185m >2	<b>0</b>	0	---
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	<1	---
Silver	ppm ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm ASTM D5185m >25	<b>2</b>	1	---
Lead	ppm ASTM D5185m >45	<b>1</b>	4	---
Copper	ppm ASTM D5185m >85	<b>1</b>	1	---
Tin	ppm ASTM D5185m >4	<b>&lt;1</b>	0	---
Vanadium	ppm ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm ASTM D5185m	<b>0</b>	<1	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>15</b>	6	---
Barium	ppm ASTM D5185m	<b>0</b>	<1	---
Molybdenum	ppm ASTM D5185m	<b>57</b>	58	---
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	0	---
Magnesium	ppm ASTM D5185m	<b>871</b>	880	---
Calcium	ppm ASTM D5185m	<b>1061</b>	1083	---
Phosphorus	ppm ASTM D5185m	<b>1015</b>	950	---
Zinc	ppm ASTM D5185m	<b>1226</b>	1202	---
Sulfur	ppm ASTM D5185m	<b>2972</b>	3069	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >30	<b>5</b>	4	---
Sodium	ppm ASTM D5185m	<b>3</b>	2	---
Potassium	ppm ASTM D5185m >20	<b>1</b>	3	---

## INFRA-RED

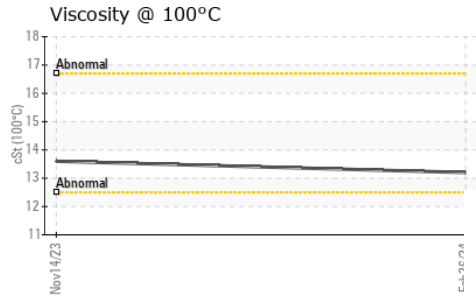
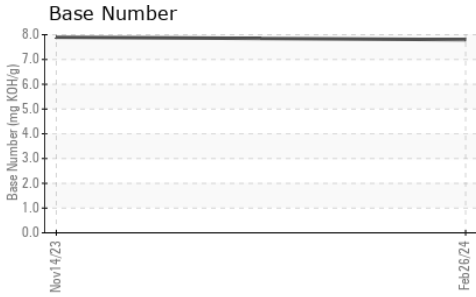
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.4</b>	0.2	---
Nitration	Abs/cm *ASTM D7624 >20	<b>8.0</b>	8.0	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.7</b>	20.6	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>15.5</b>	16.7	---
Base Number (BN)	mg KOH/g ASTM D2896	<b>7.8</b>	7.9	---



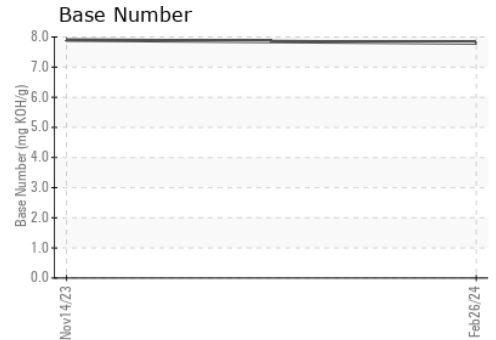
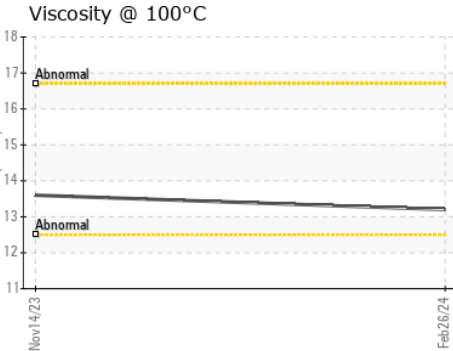
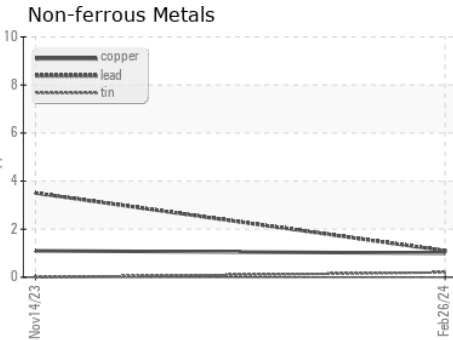
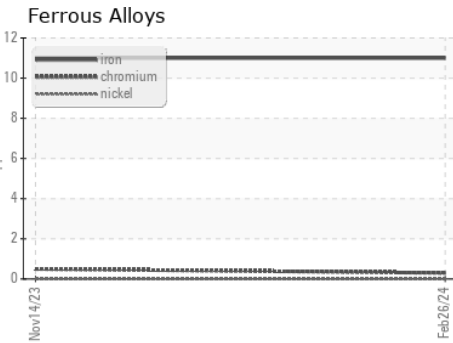
# OIL ANALYSIS REPORT



PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	13.2	13.6	---

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0061431  
 Lab Number : 06103590  
 Unique Number : 10901820  
 Test Package : FLEET

Received : 28 Feb 2024  
 Tested : 29 Feb 2024  
 Diagnosed : 01 Mar 2024 - Don Baldrige

GFL Environmental - 642- Grand Rapids Hauling  
 5826 Alden Nash Ave SE  
 Lowell, MI  
 US 49331  
 Contact: Josh Arnett  
 joshuaarnett@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: