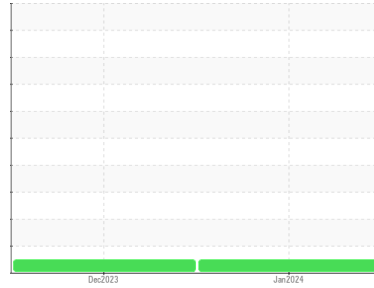




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**KENWORTH 413060**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC ELITE 15W40 (--- 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>GFL0111350</b>	GFL0095477	---
Sample Date	Client Info		<b>26 Jan 2024</b>	19 Dec 2023	---
Machine Age	hrs	Client Info	<b>2262</b>	2112	---
Oil Age	hrs	Client Info	<b>500</b>	500	---
Oil Changed	Client Info		<b>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 >100	<b>6</b>	22	---
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >20	<b>5</b>	10	---
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	1	---
Tin	ppm	ASTM D5185m >15	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>119</b>	67	---
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Molybdenum	ppm	ASTM D5185m	<b>118</b>	112	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	<b>629</b>	638	---
Calcium	ppm	ASTM D5185m	<b>1153</b>	1171	---
Phosphorus	ppm	ASTM D5185m	<b>682</b>	692	---
Zinc	ppm	ASTM D5185m	<b>767</b>	761	---
Sulfur	ppm	ASTM D5185m	<b>2949</b>	2917	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>8</b>	12	---
Sodium	ppm	ASTM D5185m	<b>3</b>	2	---
Potassium	ppm	ASTM D5185m >20	<b>6</b>	21	---

## INFRA-RED

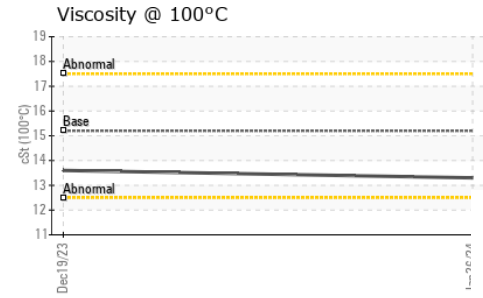
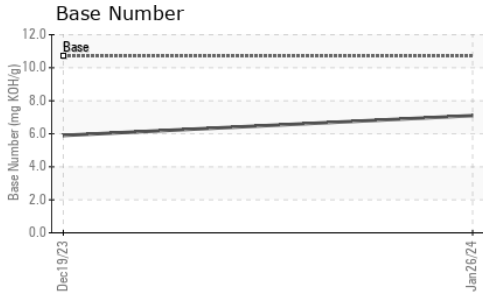
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	0.2	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.4</b>	10.4	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.6</b>	19.0	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.2</b>	17.0	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.7	<b>7.1</b>	5.9	---



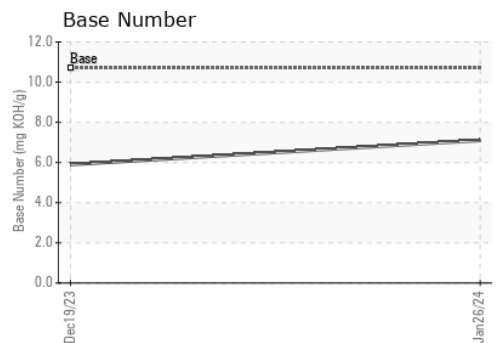
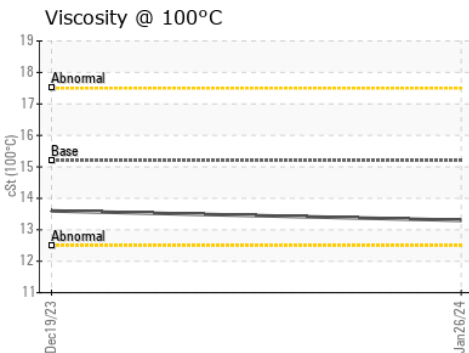
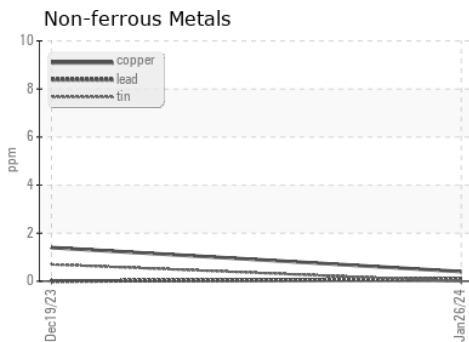
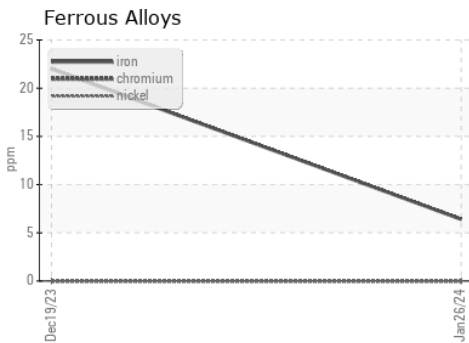
# OIL ANALYSIS REPORT



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	15.2	13.3	13.6

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0111350  
 Lab Number : 06099801  
 Unique Number : 10898031  
 Test Package : FLEET

Received : 26 Feb 2024  
 Tested : 27 Feb 2024  
 Diagnosed : 27 Feb 2024 - Don Baldrige

GFL Environmental - 981 - Port Arthur Hauling  
 1000 S Business Park Dr  
 Port Arthur, TX  
 US 77640  
 Contact: MICHAEL KAY  
 mkay@gflenv.com  
 T: (336)660-9331  
 F:

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)