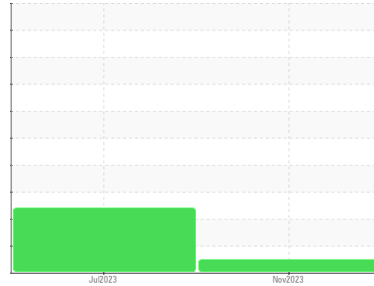




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**813026**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 30 (62 QTS)**

## 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>GFL0092719</b>	GFL0072380	---
Sample Date	Client Info		<b>02 Nov 2023</b>	13 Jul 2023	---
Machine Age	hrs	Client Info	<b>2677</b>	2677	---
Oil Age	hrs	Client Info	<b>262</b>	752	---
Oil Changed	Client Info		<b>Not Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	ABNORMAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	0.4	---
Glycol	WC Method		<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >120	<b>29</b>	107	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	4	---
Nickel	ppm	ASTM D5185m >5	<b>2</b>	▲ 13	---
Titanium	ppm	ASTM D5185m >2	<b>0</b>	<1	---
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	---
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	6	---
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	---
Copper	ppm	ASTM D5185m >330	<b>22</b>	163	---
Tin	ppm	ASTM D5185m >15	<b>2</b>	7	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	<b>11</b>	31	---
Barium	ppm	ASTM D5185m 10	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 100	<b>67</b>	117	---
Manganese	ppm	ASTM D5185m	<b>1</b>	6	---
Magnesium	ppm	ASTM D5185m 450	<b>981</b>	920	---
Calcium	ppm	ASTM D5185m 3000	<b>1175</b>	1488	---
Phosphorus	ppm	ASTM D5185m 1150	<b>1028</b>	873	---
Zinc	ppm	ASTM D5185m 1350	<b>1338</b>	1104	---
Sulfur	ppm	ASTM D5185m 4250	<b>2835</b>	2512	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>8</b>	▲ 45	---
Sodium	ppm	ASTM D5185m >75	<b>1</b>	5	---
Potassium	ppm	ASTM D5185m >20	<b>3</b>	14	---

## INFRA-RED

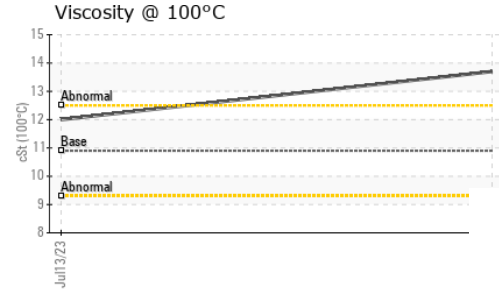
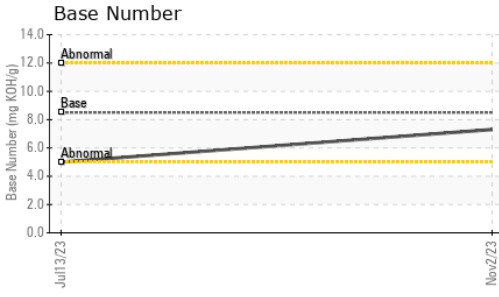
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.7</b>	1.5	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.1</b>	15.3	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.2</b>	26.8	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>17.1</b>	29.8	---
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	<b>7.3</b>	5.0	---



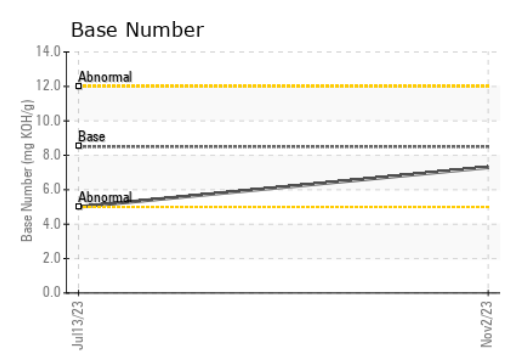
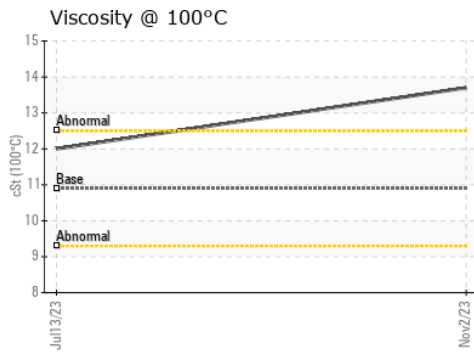
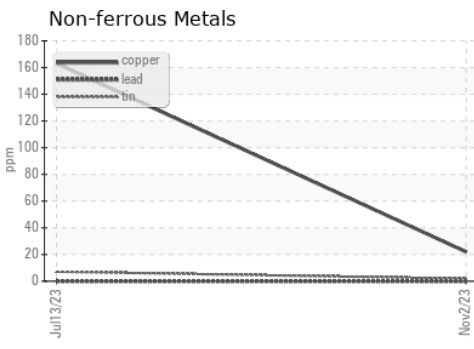
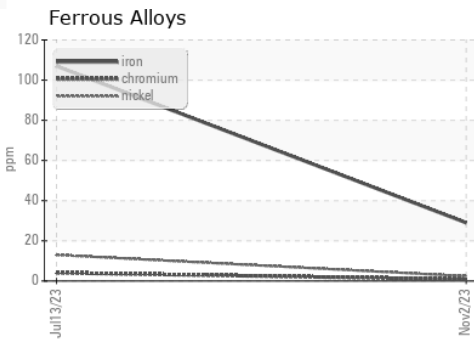
# OIL ANALYSIS REPORT



VISUAL	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	10.9	<b>13.7</b>	12.0	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0092719 **Received** : 06 Nov 2023  
**Lab Number** : **05998793** **Diagnosed** : 07 Nov 2023  
**Unique Number** : 10727153 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 005 - Wilson/Tri-East(CNG)**  
 2810 Contentnea Road S  
 Wilson, NC  
 US 27893-8501  
 Contact: WALTER SKOKOWSKI  
 walter.skokowski@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)