



# PROBLEM SUMMARY



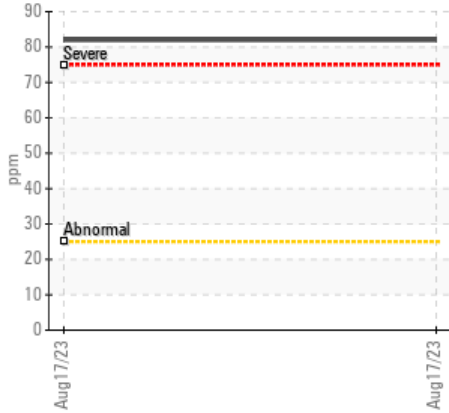
Machine Id  
**414052**  
 Component  
**Diesel Engine**  
 Fluid  
**NOT GIVEN (60 QTS)**

Sample Rating Trend

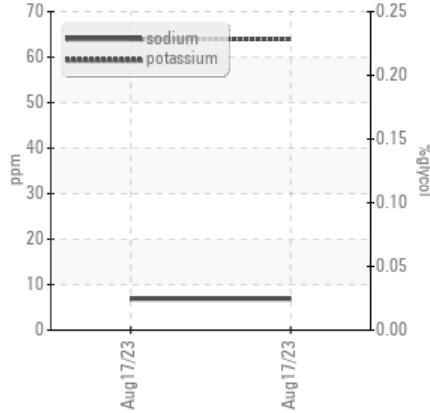


## COMPONENT CONDITION SUMMARY

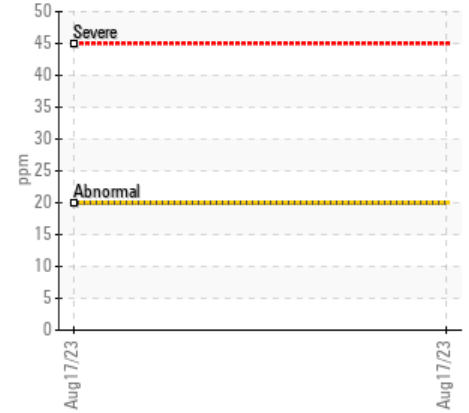
▲ Silicon (ppm)



Glycol Contamination



Aluminum (ppm)



## RECOMMENDATION

No corrective action is recommended at this time.  
 Resample at the next service interval to monitor.  
 Please specify the brand, type, and viscosity of the oil on your next sample.

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	---	---
Silicon	ppm	ASTM D5185m	>25	▲ 82	---	---

Customer Id: GFL005  
 Sample No.: GFL0072375  
 Lab Number: 05941979  
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id  
**414052**  
 Component  
**Diesel Engine**  
 Fluid  
**NOT GIVEN (60 QTS)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### Contamination

Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0072375</b>	---	---
Sample Date	Client Info	<b>17 Aug 2023</b>	---	---
Machine Age	hrs	Client Info	<b>258</b>	---
Oil Age	hrs	Client Info	<b>258</b>	---
Oil Changed	Client Info	<b>Not Chngd</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	<b>NEG</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >120	<b>27</b>	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	---
Nickel	ppm	ASTM D5185m >15	<b>1</b>	---
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	---
Silver	ppm	ASTM D5185m >3	<b>1</b>	---
Aluminum	ppm	ASTM D5185m >20	<b>20</b>	---
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	---
Copper	ppm	ASTM D5185m >330	<b>116</b>	---
Tin	ppm	ASTM D5185m >15	<b>2</b>	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>390</b>	---
Barium	ppm	ASTM D5185m	<b>0</b>	---
Molybdenum	ppm	ASTM D5185m	<b>129</b>	---
Manganese	ppm	ASTM D5185m	<b>4</b>	---
Magnesium	ppm	ASTM D5185m	<b>721</b>	---
Calcium	ppm	ASTM D5185m	<b>1588</b>	---
Phosphorus	ppm	ASTM D5185m	<b>706</b>	---
Zinc	ppm	ASTM D5185m	<b>833</b>	---
Sulfur	ppm	ASTM D5185m	<b>2841</b>	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>▲ 82</b>	---
Sodium	ppm	ASTM D5185m	<b>7</b>	---
Potassium	ppm	ASTM D5185m >20	<b>64</b>	---
Fuel	%	ASTM D3524 >3.0	<b>0.5</b>	---

## INFRA-RED

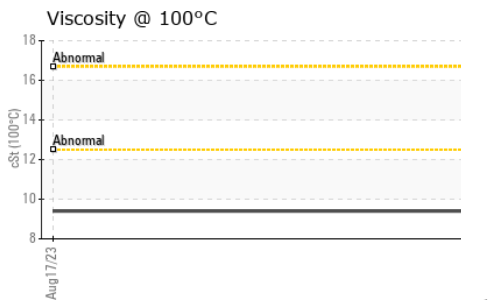
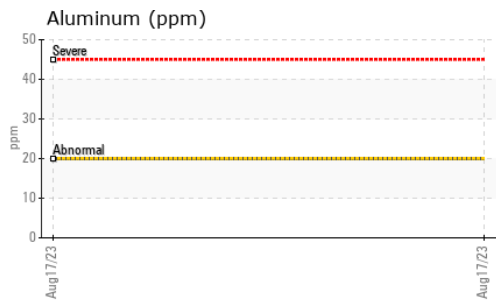
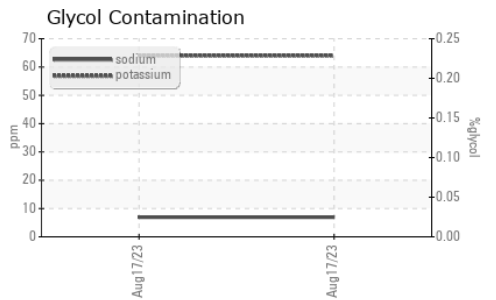
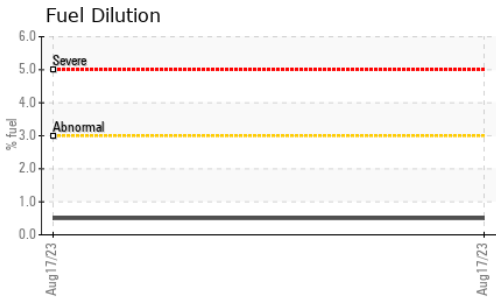
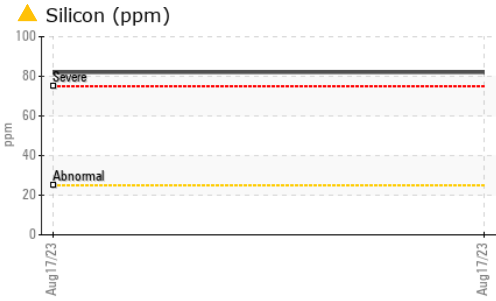
method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.2</b>	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.7</b>	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>24.8</b>	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>20.9</b>	---
Base Number (BN)	mg KOH/g	ASTM D2896	<b>8.9</b>	---



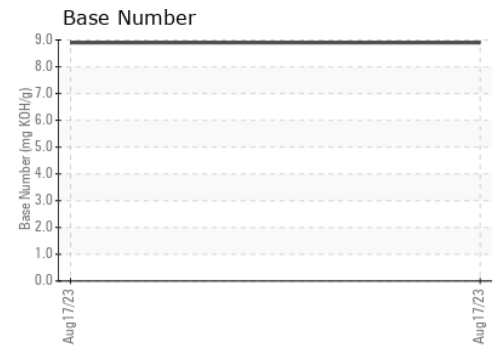
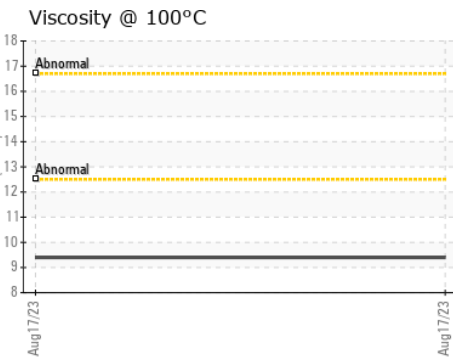
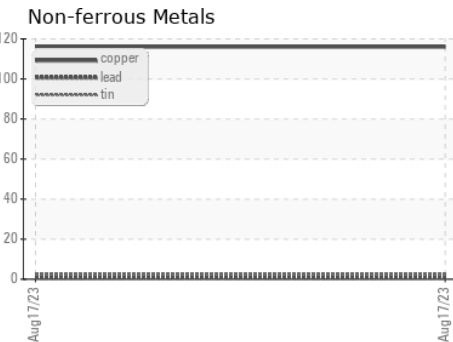
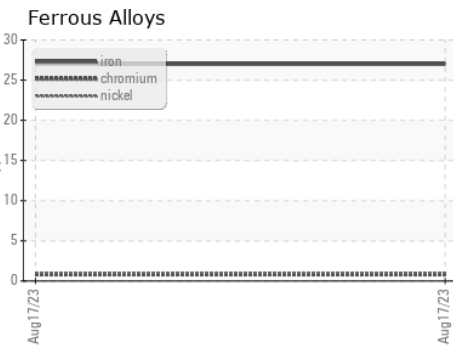
# OIL ANALYSIS REPORT



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	<b>9.4</b>	---	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0072375 **Received** : 05 Sep 2023  
**Lab Number** : **05941979** **Diagnosed** : 07 Sep 2023  
**Unique Number** : 10632591 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

**GFL Environmental - 005 - Wilson/Tri-East(CNG)**  
 2810 Contentnea Road S  
 Wilson, NC  
 US 27893-8501  
 Contact: SPENCER LIGGON  
 spencer.liggon@gflenv.com  
 T: (800)207-6618  
 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)