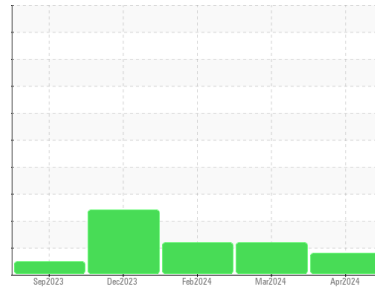




# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id

## KENWORTH 426142-SW4619

Component

Diesel Engine

Fluid

MOBIL DELVAC ELITE 15W40 (--- GAL)

### DIAGNOSIS

#### Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

#### Wear

All component wear rates are normal.

#### Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

#### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0111296</b>	GFL0095463	GFL0111337
Sample Date	Client Info		<b>10 Apr 2024</b>	01 Mar 2024	08 Feb 2024
Machine Age	hrs	Client Info	<b>16375</b>	16064	16375
Oil Age	hrs	Client Info	<b>16375</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

### CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

### WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	<b>34</b>	17	13
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	7	4
Lead	ppm	ASTM D5185m	>40	<b>2</b>	1	<1
Copper	ppm	ASTM D5185m	>330	<b>7</b>	2	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	0

### ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>43</b>	48	57
Barium	ppm	ASTM D5185m		<b>0</b>	1	1
Molybdenum	ppm	ASTM D5185m		<b>122</b>	131	113
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>645</b>	646	630
Calcium	ppm	ASTM D5185m		<b>1203</b>	1243	1218
Phosphorus	ppm	ASTM D5185m		<b>736</b>	712	698
Zinc	ppm	ASTM D5185m		<b>809</b>	831	790
Sulfur	ppm	ASTM D5185m		<b>3475</b>	3202	3013

### CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>7</b>	8	6
Sodium	ppm	ASTM D5185m		<b>9</b>	1	6
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	8	2
Fuel	%	ASTM D3524	>5	<b>▲ 7.8</b>	▲ 6.7	▲ 7.0

### INFRA-RED

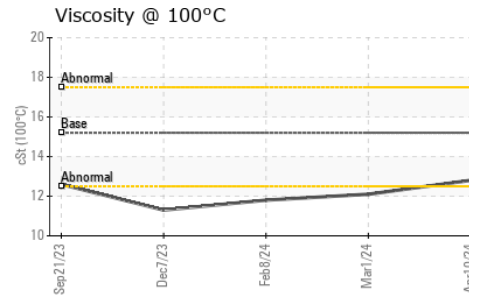
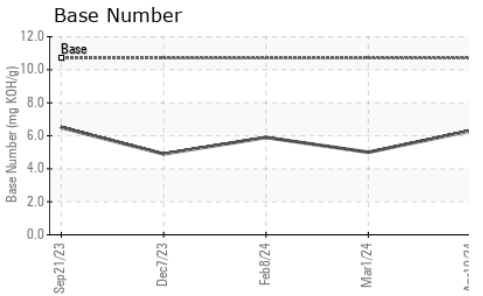
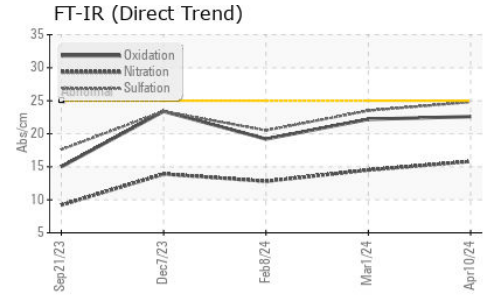
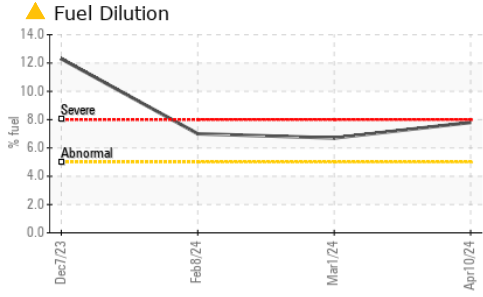
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>1.5</b>	0.9	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>15.8</b>	14.5	12.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.8</b>	23.5	20.5

### FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>22.6</b>	22.2	19.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	<b>6.3</b>	5.0	5.9



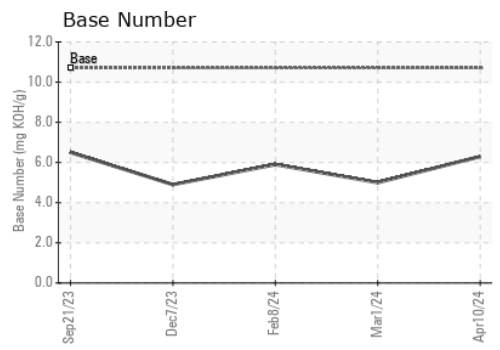
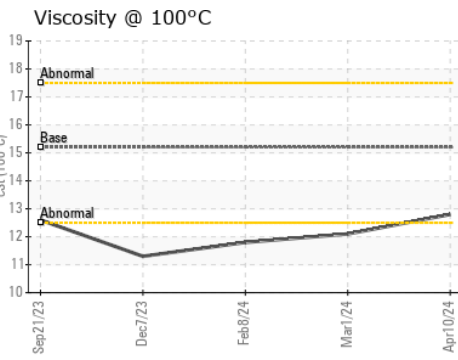
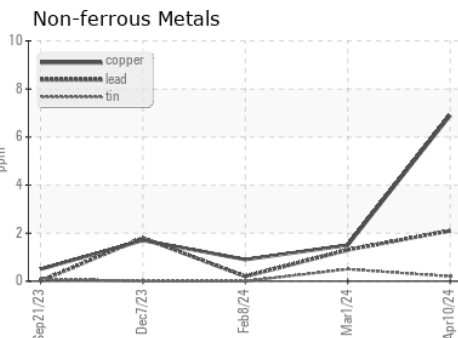
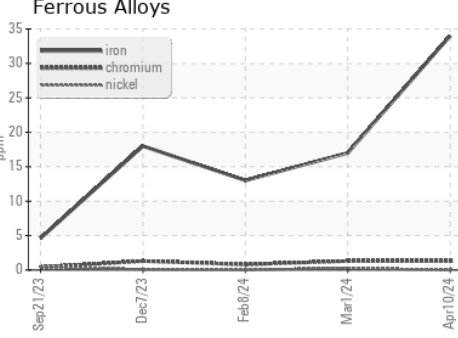
# OIL ANALYSIS REPORT



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	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.2	<b>12.8</b>	▲ 12.1 ▲ 11.8

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0111296      **Received** : 09 Jul 2024  
**Lab Number** : 06231211      **Tested** : 11 Jul 2024  
**Unique Number** : 11114704      **Diagnosed** : 11 Jul 2024 - Wes Davis  
**Test Package** : FLEET ( Additional Tests: PercentFuel )

**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)