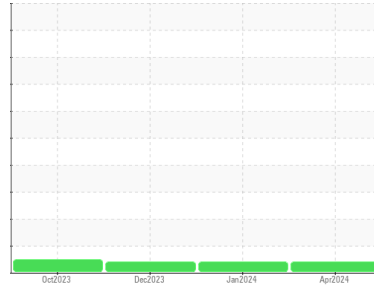




# OIL ANALYSIS REPORT

## Sample Rating Trend



## VISCOSITY



Machine Id  
**KENWORTH 427205-SW4831**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC ELITE 15W40 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Oil and filter change at the time of sampling has been noted. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>GFL0111304</b>	GFL0111346	GFL0095485
Sample Date	Client Info			<b>24 Apr 2024</b>	30 Jan 2024	26 Dec 2023
Machine Age	hrs	Client Info		<b>13576</b>	13034	12863
Oil Age	hrs	Client Info		<b>542</b>	500	500
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	ATTENTION	ATTENTION

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	<1.0	1.3
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>8</b>	1	7
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	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>4</b>	2	3
Lead	ppm	ASTM D5185m	>40	<b>2</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>88</b>	130	82
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>134</b>	120	108
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>700</b>	616	620
Calcium	ppm	ASTM D5185m		<b>1303</b>	1140	1116
Phosphorus	ppm	ASTM D5185m		<b>818</b>	674	657
Zinc	ppm	ASTM D5185m		<b>903</b>	749	729
Sulfur	ppm	ASTM D5185m		<b>3958</b>	2868	2798

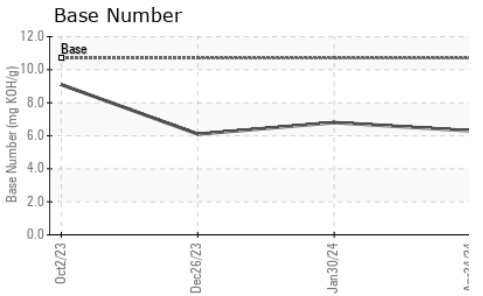
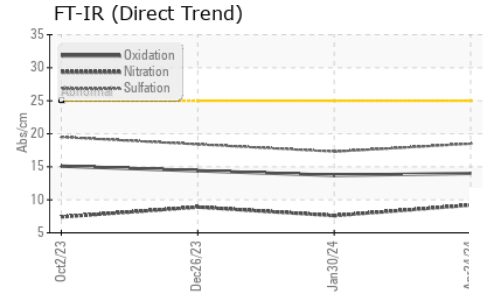
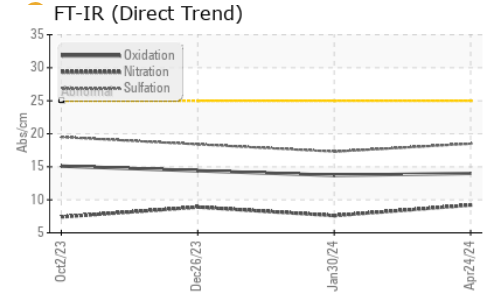
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>3</b>	4	6
Sodium	ppm	ASTM D5185m		<b>3</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	0	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.8</b>	0.2	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.2</b>	7.6	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.5</b>	17.3	18.4

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.0</b>	13.7	14.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	<b>6.3</b>	6.8	6.1



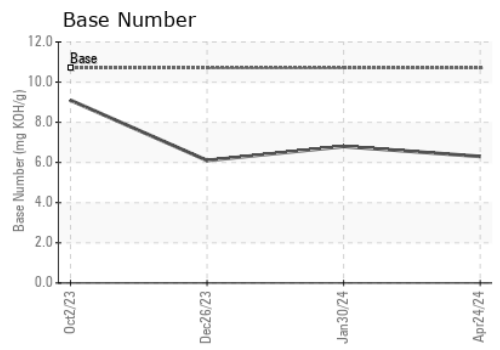
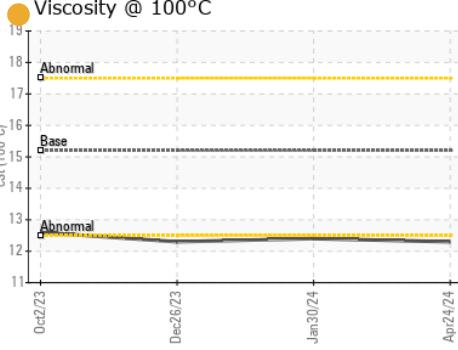
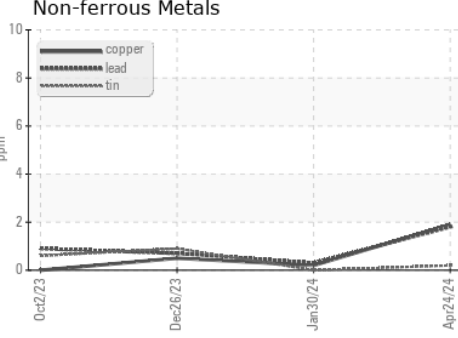
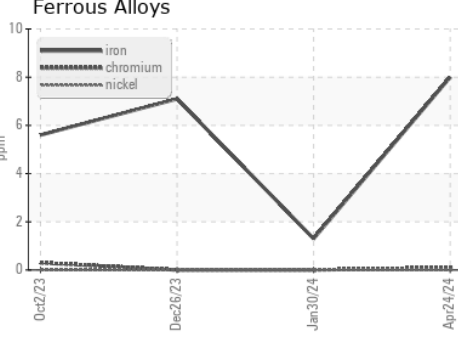
# OIL ANALYSIS REPORT



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	<span style="color: orange;">●</span> 12.3	<span style="color: orange;">●</span> 12.4	<span style="color: orange;">●</span> 12.3

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0111304      **Received** : 09 Jul 2024  
**Lab Number** : 06231188      **Tested** : 10 Jul 2024  
**Unique Number** : 11114681      **Diagnosed** : 10 Jul 2024 - Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 981 - Port Arthur Hauling**  
 1000 S Business Park Dr  
 Port Arthur, TX  
 US 77640  
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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)