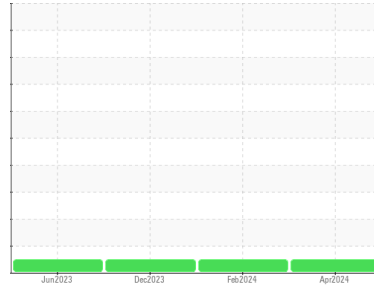




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**MACK 413064**  
 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>GFL0111257</b>	GFL0111339	GFL0095438
Sample Date	Client Info			<b>09 Apr 2024</b>	07 Feb 2024	01 Dec 2023
Machine Age	hrs	Client Info		<b>3726</b>	3262	2987
Oil Age	hrs	Client Info		<b>0</b>	0	500
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<b>&lt;1.0</b>	<1.0	<1.0
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	>120	<b>4</b>	5	5
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	2	<1
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	3	3
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>78</b>	101	72
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>130</b>	115	121
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>704</b>	657	632
Calcium	ppm	ASTM D5185m		<b>1326</b>	1249	1180
Phosphorus	ppm	ASTM D5185m		<b>777</b>	714	639
Zinc	ppm	ASTM D5185m		<b>881</b>	805	787
Sulfur	ppm	ASTM D5185m		<b>3584</b>	3179	3751

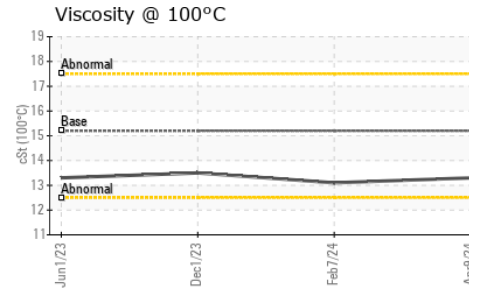
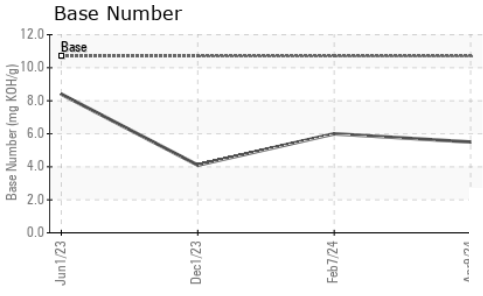
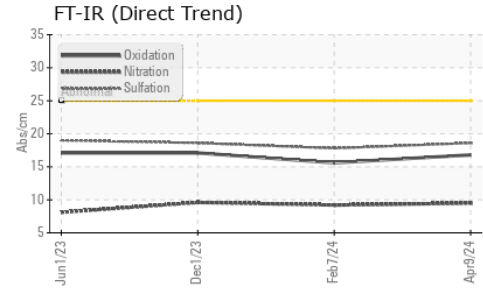
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	4	4
Sodium	ppm	ASTM D5185m		<b>2</b>	2	0
Potassium	ppm	ASTM D5185m	>20	<b>16</b>	3	4

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>4	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.5</b>	9.2	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.6</b>	17.8	18.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.8</b>	15.6	17.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	<b>5.5</b>	6.0	4.1



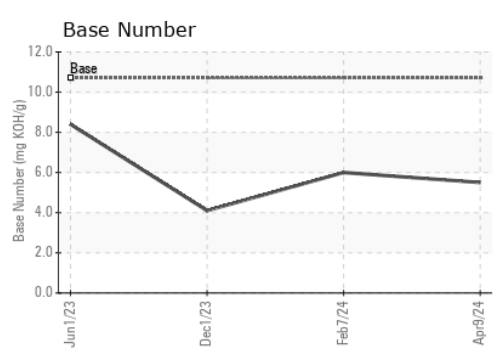
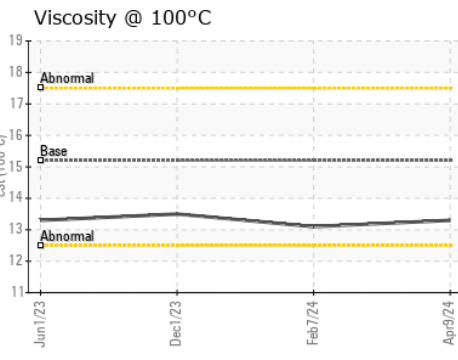
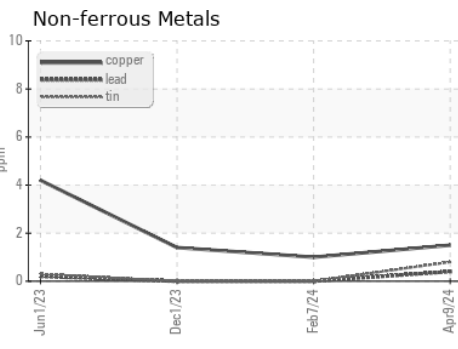
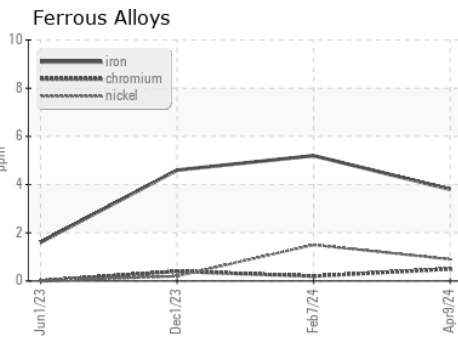
# OIL ANALYSIS REPORT



PARAMETER	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>13.3</b>	13.1	13.5

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0111257      **Received** : 15 Apr 2024  
**Lab Number** : **06148334**      **Tested** : 16 Apr 2024  
**Unique Number** : 10978412      **Diagnosed** : 16 Apr 2024 - Wes Davis  
**Test Package** : FLEET

**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)