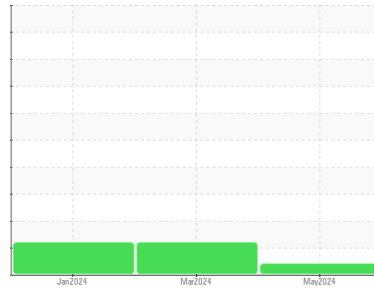




# OIL ANALYSIS REPORT

Sample Rating Trend



## VISCOSITY



Machine Id  
**FREIGHTLINER 2127**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL 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.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0917220</b>	WC0906191	WC0878828
Sample Date	Client Info		<b>23 May 2024</b>	19 Mar 2024	05 Jan 2024
Machine Age	mls	Client Info	<b>262854</b>	253145	242749
Oil Age	mls	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>MARGINAL</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 >80	<b>11</b>	14	15
Chromium	ppm	ASTM D5185m >5	<b>0</b>	2	1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >30	<b>&lt;1</b>	2	1
Lead	ppm	ASTM D5185m >30	<b>2</b>	5	4
Copper	ppm	ASTM D5185m >150	<b>0</b>	1	<1
Tin	ppm	ASTM D5185m >5	<b>0</b>	2	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	1	<1

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>2</b>	1	3
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>52</b>	57	53
Manganese	ppm	ASTM D5185m	<b>0</b>	1	<1
Magnesium	ppm	ASTM D5185m	<b>901</b>	883	950
Calcium	ppm	ASTM D5185m	<b>1049</b>	1029	1021
Phosphorus	ppm	ASTM D5185m	<b>962</b>	1028	988
Zinc	ppm	ASTM D5185m	<b>1154</b>	1150	1143
Sulfur	ppm	ASTM D5185m	<b>3487</b>	3218	2911

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>2</b>	5	4
Sodium	ppm	ASTM D5185m >118	<b>0</b>	<1	1
Potassium	ppm	ASTM D5185m >20	<b>1</b>	4	2
Fuel	%	ASTM D3524 >5	<b>&lt;1.0</b>	▲ 3.6	▲ 4.1

### INFRA-RED

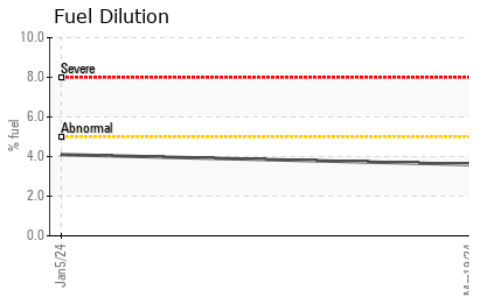
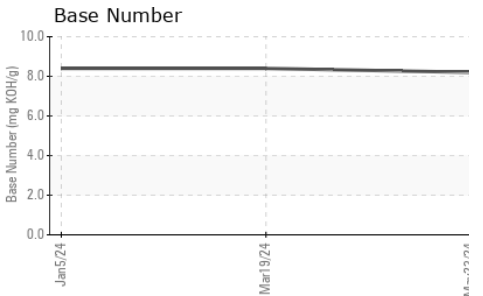
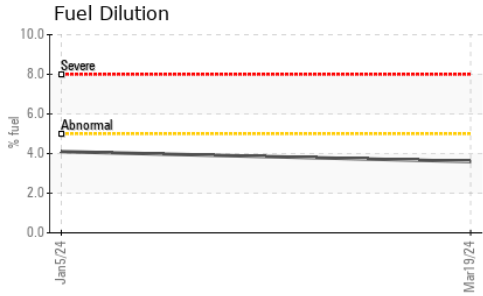
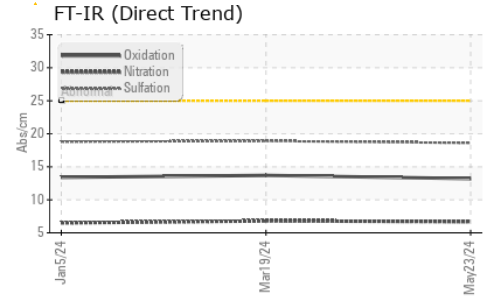
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.9</b>	0.7	0.7
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.7</b>	6.8	6.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.6</b>	18.9	18.8

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.2</b>	13.7	13.4
Base Number (BN)	mg KOH/g	ASTM D2896	<b>8.2</b>	8.4	8.4



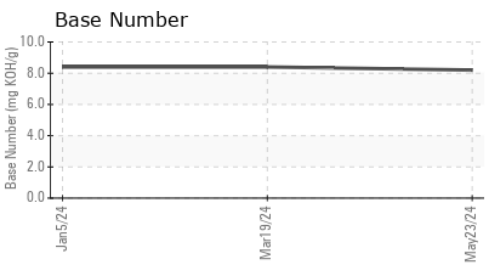
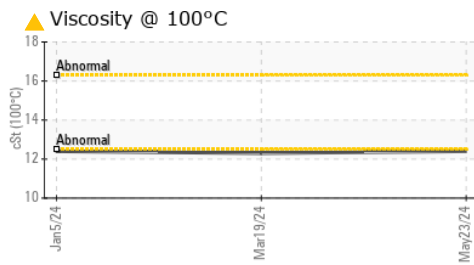
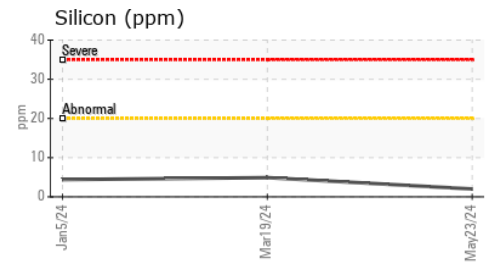
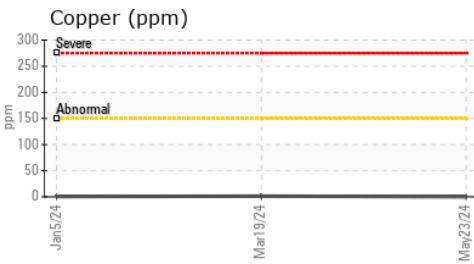
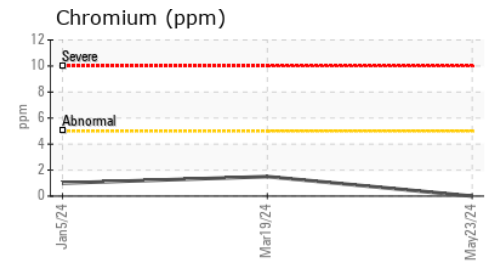
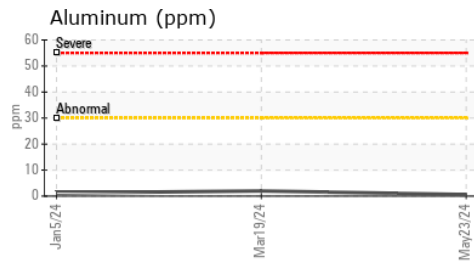
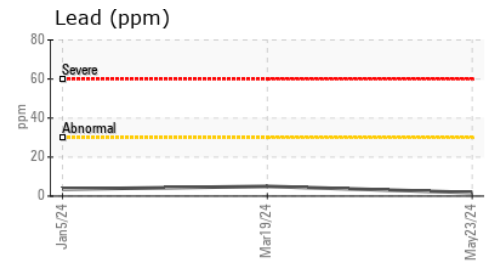
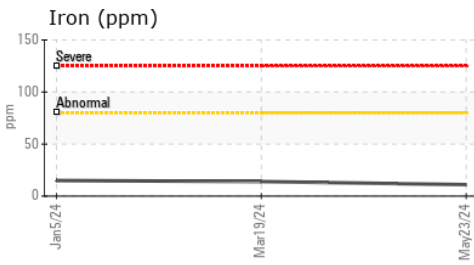
# OIL ANALYSIS REPORT



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	▲ 12.4	▲ 12.3	▲ 12.4

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0917220      **Received** : 19 Jun 2024  
**Lab Number** : 06214274      **Tested** : 21 Jun 2024  
**Unique Number** : 11087138      **Diagnosed** : 21 Jun 2024 - Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: FUELDILUTION, PercentFuel, TBN )

**CONCRETE SERVICE CO - FAY BLOCK**  
 161 BUILDERS BLVD  
 FAYETTEVILLE, NC  
 US 28301  
 Contact: BRYAN VANNIMAN  
 bryanvanniman@fayblock.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)