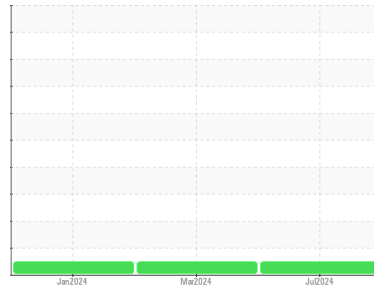




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**FREIGHTLINER 1243**  
 Component  
**Diesel Engine**  
 Fluid  
 **DIESEL ENGINE OIL SAE 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>WC0949295</b>	WC0917313	WC0878837
Sample Date	Client Info		<b>02 Jul 2024</b>	22 Mar 2024	10 Jan 2024
Machine Age	mls	Client Info	<b>97673</b>	91900	80938
Oil Age	mls	Client Info	<b>0</b>	0	0
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	>5	<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	>100	<b>9</b>	15	11
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	2	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	5	4
Lead	ppm	ASTM D5185m	>40	<b>0</b>	1	<1
Copper	ppm	ASTM D5185m	>330	<b>10</b>	22	22
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	2
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	250	<b>5</b>	<1	2
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>58</b>	62	55
Manganese	ppm	ASTM D5185m		<b>0</b>	1	<1
Magnesium	ppm	ASTM D5185m	450	<b>924</b>	937	992
Calcium	ppm	ASTM D5185m	3000	<b>1105</b>	1061	1046
Phosphorus	ppm	ASTM D5185m	1150	<b>1001</b>	1067	1044
Zinc	ppm	ASTM D5185m	1350	<b>1224</b>	1212	1205
Sulfur	ppm	ASTM D5185m	4250	<b>2946</b>	3169	3004

### CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>3</b>	4	3
Sodium	ppm	ASTM D5185m	>158	<b>&lt;1</b>	<1	1
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	10	10

### INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.5</b>	7.0	6.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.6</b>	19.3	18.5

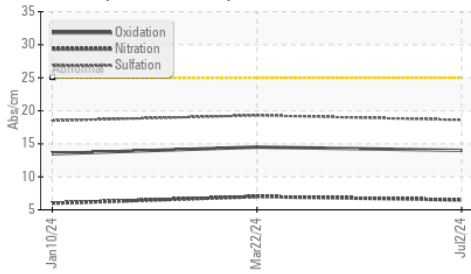
### FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.0</b>	14.5	13.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.7</b>	8.7	8.7

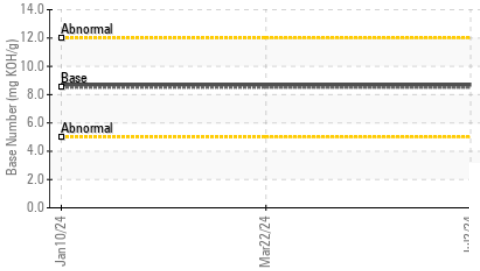


# OIL ANALYSIS REPORT

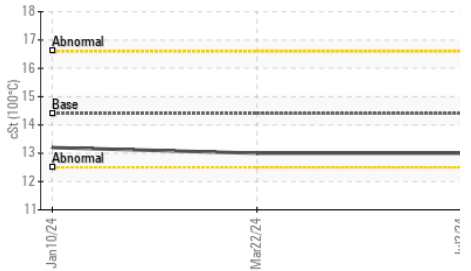
FT-IR (Direct Trend)



Base Number



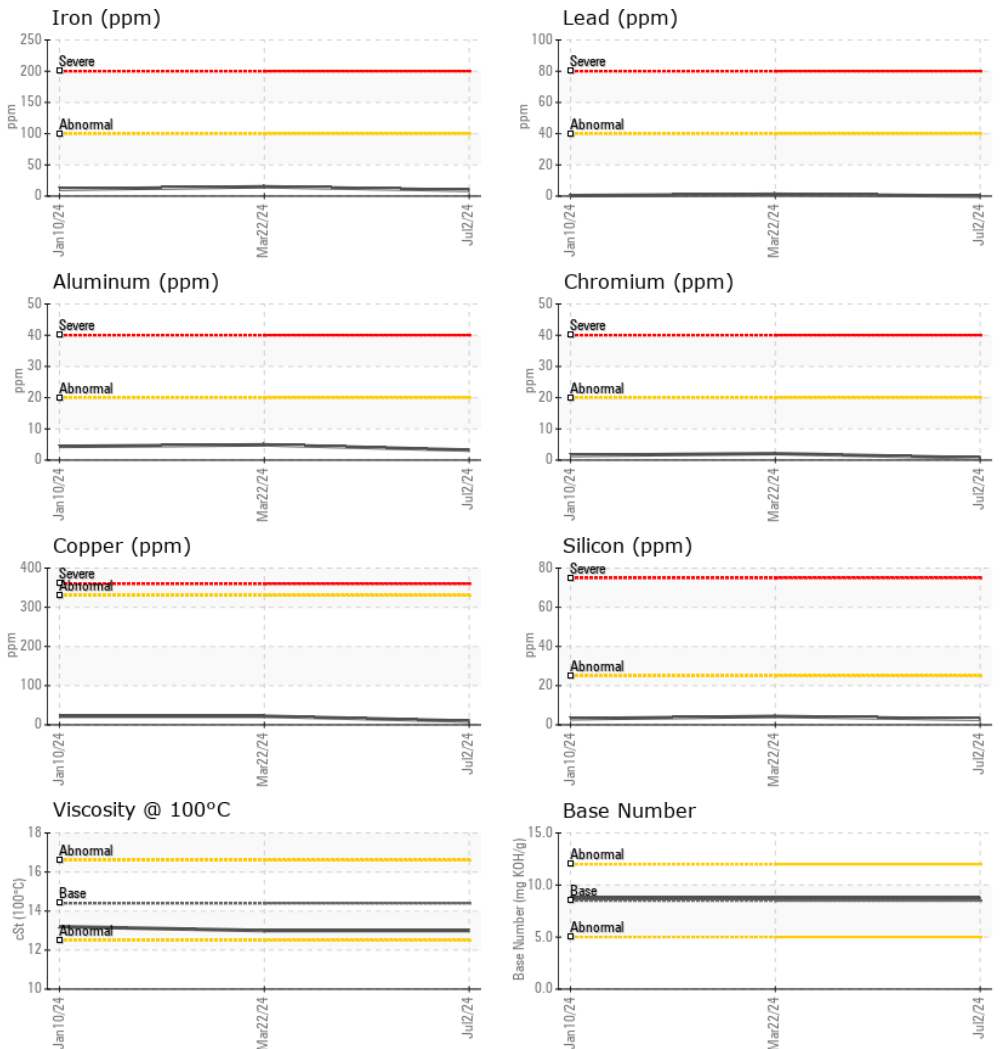
Viscosity @ 100°C



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	14.4	13.0	13.2

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0949295  
**Lab Number** : 06241398  
**Unique Number** : 11130232  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**CONCRETE SERVICE CO - FAY BLOCK**  
 161 BUILDERS BLVD  
 FAYETTEVILLE, NC  
 US 28301

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)

Contact: BRYAN VANNIMAN  
 bryanvanniman@fayblock.com  
 T: (800)326-9198