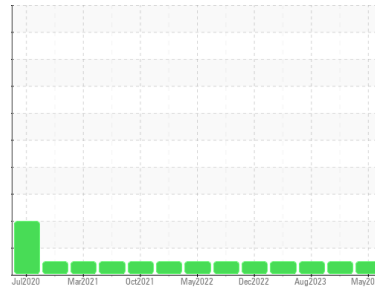




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**FREIGHTLINER M-2106 8006 (S/N 1FVACWD25LHLT8661)**  
 Component  
**Diesel Engine**  
 Fluid  
**{not provided} (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

### 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>WC0899138</b>	WC0879431	WC0837187
Sample Date	Client Info		<b>28 May 2024</b>	24 Nov 2023	10 Aug 2023
Machine Age	mls	Client Info	<b>79083</b>	73017	67015
Oil Age	mls	Client Info	<b>6066</b>	6002	607
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## 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	>200	<b>15</b>	12	13
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>10</b>	7	8
Lead	ppm	ASTM D5185m	>30	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>30	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
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>60</b>	54	63
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	3	0
Molybdenum	ppm	ASTM D5185m		<b>245</b>	242	267
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>459</b>	404	508
Calcium	ppm	ASTM D5185m		<b>1173</b>	1138	1299
Phosphorus	ppm	ASTM D5185m		<b>631</b>	530	682
Zinc	ppm	ASTM D5185m		<b>731</b>	684	870
Sulfur	ppm	ASTM D5185m		<b>2074</b>	2085	2672

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>30	<b>7</b>	6	6
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	5	<1
Fuel	%	ASTM D3524	>3.0	<b>&lt;1.0</b>	<1.0	<1.0

## INFRA-RED

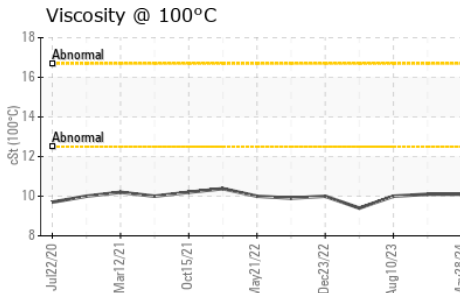
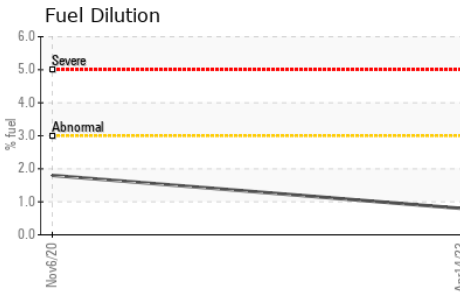
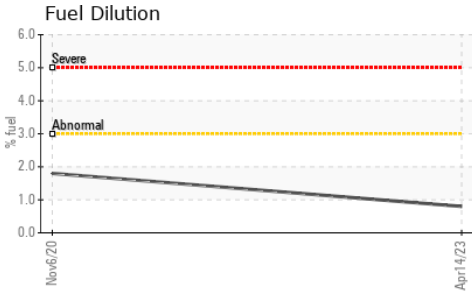
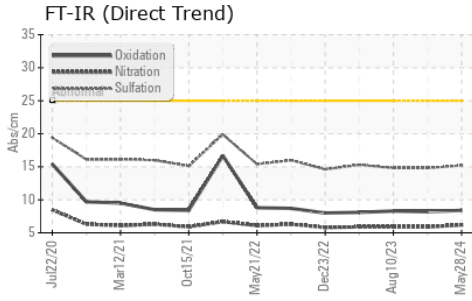
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.2</b>	5.9	5.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>15.2</b>	14.8	14.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>8.4</b>	8.2	8.3
Base Number (BN)	mg KOH/g	ASTM D2896		<b>4.9</b>	5.4	5.0



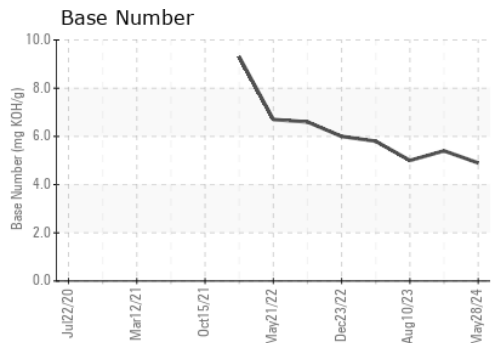
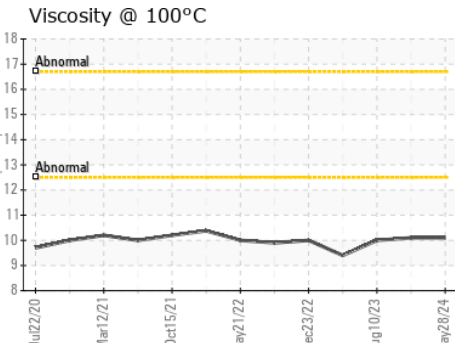
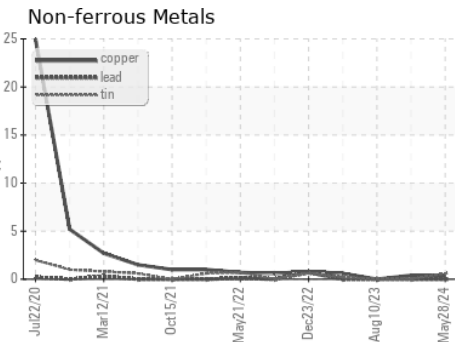
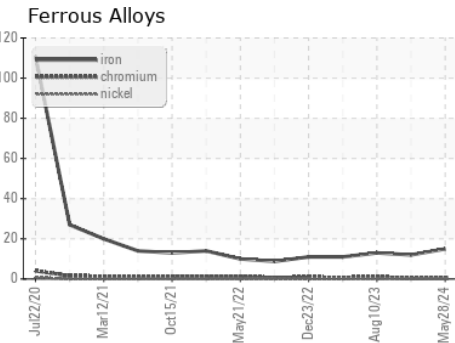
# OIL ANALYSIS REPORT



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	10.1	10.1	10.0

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0899138      **Received** : 31 May 2024  
**Lab Number** : 06196215      **Tested** : 03 Jun 2024  
**Unique Number** : 11058338      **Diagnosed** : 03 Jun 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: FuelDilution, TBN )

**TRADER CONSTRUCTION CO.**  
 PO DRAWER 1578  
 NEW BERN, NC  
 US 28563  
 Contact: MIKE WYATT  
 mwyatt@traderconstruction.com  
 T: (252)633-1399  
 F: (252)638-4871

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)