

## **OIL ANALYSIS REPORT**

Area Columbus County NC Machine to KENWORTH TRUCK 111

Diesel Engine Fluid GUARD PLUS 15W40 (--- GAL)

#### DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: Guard plus 15-40 )  $\,$ 

## Wear

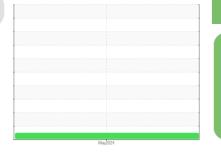
All component wear rates are normal.

#### 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 Rating Trend



NORMAL

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0917088		
Sample Date		Client Info		08 May 2024		
Machine Age	mls	Client Info		2530112		
Oil Age	mls	Client Info		20000		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
lron	ppm	ASTM D5185m	>100	18		
Chromium	ppm	ASTM D5185m	>20	2		
Nickel	ppm	ASTM D5185m	>4	2		
Titanium	ppm	ASTM D5185m	0	<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	4		
Lead	ppm	ASTM D5185m	>40	8		
Copper	ppm		>330	1		
Tin	ppm	ASTM D5185m	>15	1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		14		
Barium	ppm	ASTM D5185m		2		
Molybdenum	ppm	ASTM D5185m		93		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m		60		
Calcium	ppm	ASTM D5185m		2200		
Phosphorus	ppm	ASTM D5185m		1054		
Zinc	ppm	ASTM D5185m		1186		
Sulfur	ppm	ASTM D5185m		3584		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	10		
Sodium	ppm	ASTM D5185m		0		
Potassium	ppm	ASTM D5185m	>20	6		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3		
Nitration	Abs/cm	*ASTM D7624	>20	10.2		
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.3		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.1		
Base Number (BN)	mg KOH/g	ASTM D2896		4.5		



3

31

5<sup>25</sup>

age 20

15

10

5. ©4

물 3.0

g 2.0

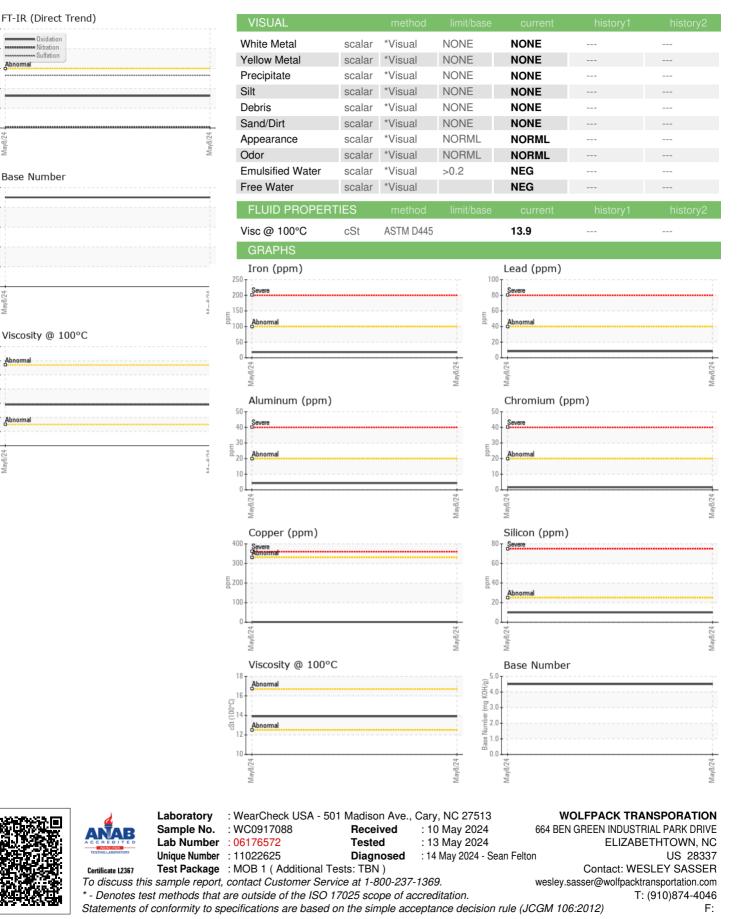
ase 1.0

18

17 16 (0-001) tso 14

12

# **OIL ANALYSIS REPORT**



Report Id: WOLELI [WUSCAR] 06176572 (Generated: 05/14/2024 16:55:35) Rev: 1

Submitted By: WESLEY SASSER

Page 2 of 2