



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**KENWORTH T880 T-867 (S/N 1NKZXPEX1LJ391741)**

Component  
**Diesel Engine**

Fluid  
**DURALENE Dura-Max 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0934688</b>	WC0693502	WC0692298
Sample Date		Client Info		<b>08 May 2024</b>	04 May 2023	23 May 2022
Machine Age	mls	Client Info		<b>248691</b>	369647	151362
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>23</b>	24	24
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	2	3
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

There is no indication of any contamination in the oil.

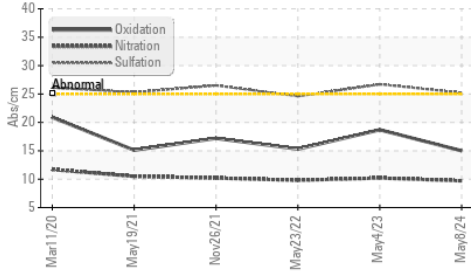
Silicon	ppm	ASTM D5185m	>25	<b>8</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	6	6
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1.1</b>	1	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.7</b>	10.2	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.2</b>	26.7	24.6
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

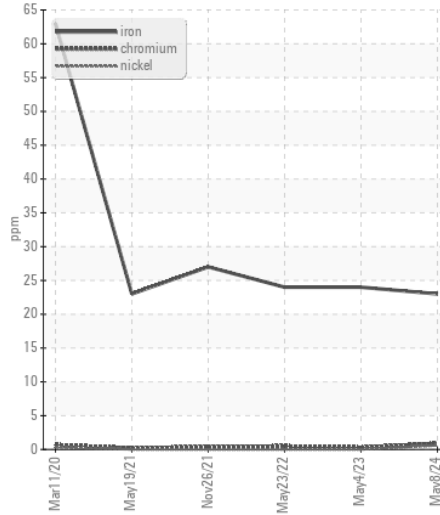
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>4</b>	1	<1
Boron	ppm	ASTM D5185m		<b>1</b>	1	3
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>4</b>	4	3
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>52</b>	62	45
Calcium	ppm	ASTM D5185m		<b>2435</b>	2725	2340
Phosphorus	ppm	ASTM D5185m		<b>953</b>	1058	893
Zinc	ppm	ASTM D5185m		<b>1129</b>	1325	1148
Sulfur	ppm	ASTM D5185m		<b>3778</b>	5173	3549
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.0</b>	18.7	15.3
Base Number (BN)	mg KOH/g	ASTM D2896		<b>5.5</b>	5.0	5.6
Visc @ 100°C	cSt	ASTM D445		<b>14.5</b>	14.7	14.8

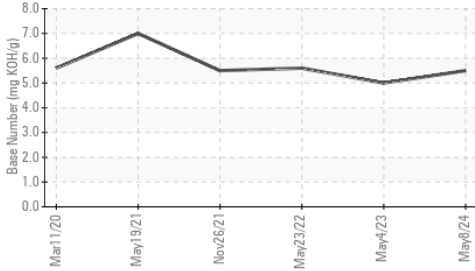
**FT-IR (Direct Trend)**



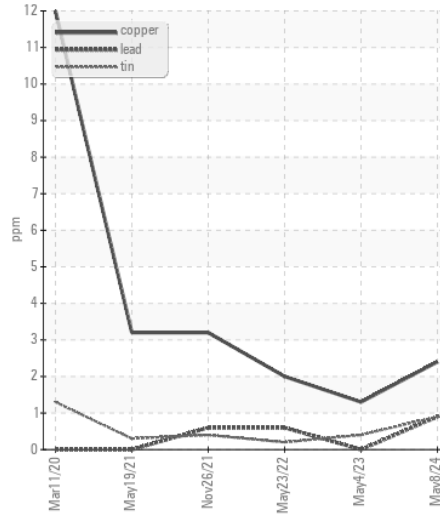
**Ferrous Alloys**



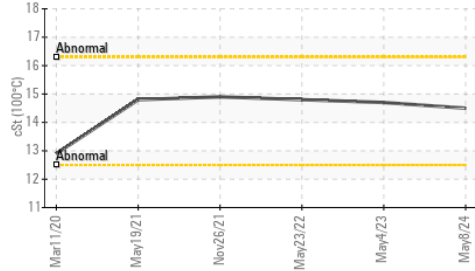
**Base Number**



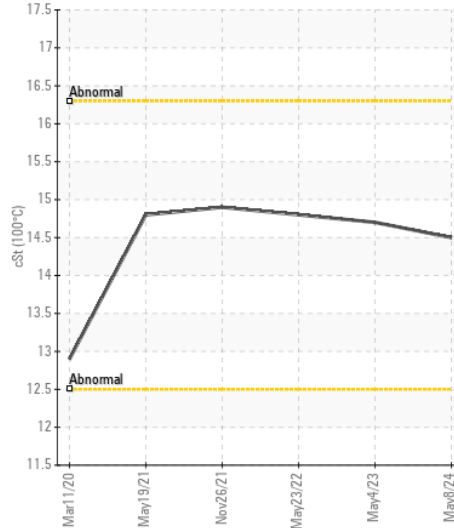
**Non-ferrous Metals**



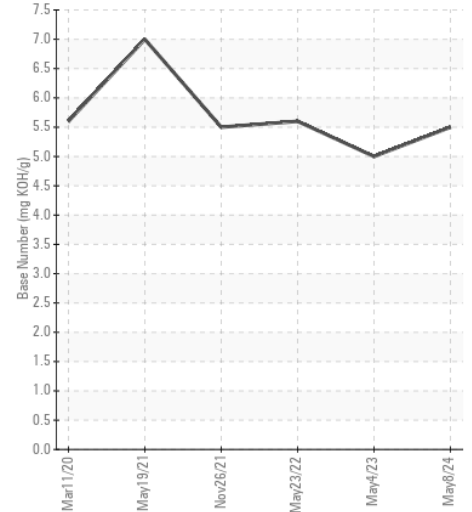
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0934688 **Received** : 28 May 2024  
**Lab Number** : 06192032 **Tested** : 29 May 2024  
**Unique Number** : 11048784 **Diagnosed** : 29 May 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**EAI EQUIPMENT A DIV OF PLEASANT CONSTRUCTION INC**  
 24024 FREDERICK ROAD  
 CLARKSBURG, MD  
 US 20871  
 Contact: Service Manager

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)

T:  
F: