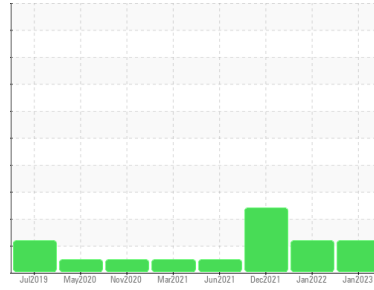




# PROBLEM SUMMARY

Sample Rating Trend



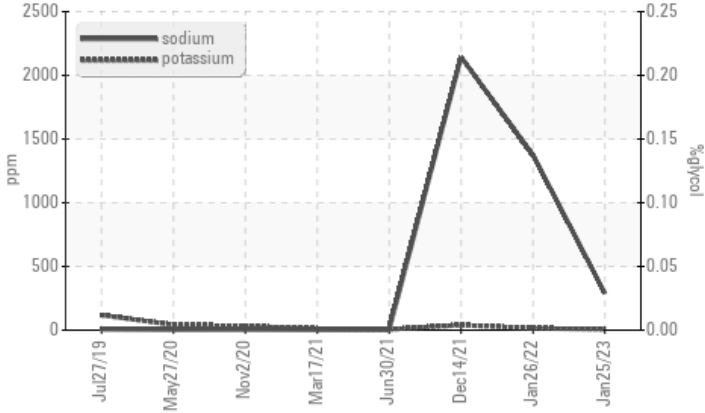
GLYCOL



Machine Id  
**KENWORTH T880 T-858 (S/N 1XKZD40X5KJ371026)**  
 Component  
**Diesel Engine**  
 Fluid  
**DURALENE Dura-Max 15W40 (44 QTS)**

## COMPONENT CONDITION SUMMARY

### ▲ Glycol Contamination



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status	ATTENTION	ABNORMAL	ABNORMAL
Sodium	▲ 289	▲ 1376	▲ 2143

Customer Id: EAICLA  
 Sample No.: WC0693416  
 Lab Number: 05758785  
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS

### 26 Jan 2022 Diag: Jonathan Hester

#### GLYCOL



We advise that you check for possible coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels remain high. The BN result indicates that there is suitable alkalinity remaining in the oil.

[view report](#)



### 14 Dec 2021 Diag: Jonathan Hester

#### GLYCOL



We advise that you check for possible coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

[view report](#)



### 30 Jun 2021 Diag: Wes Davis

#### NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

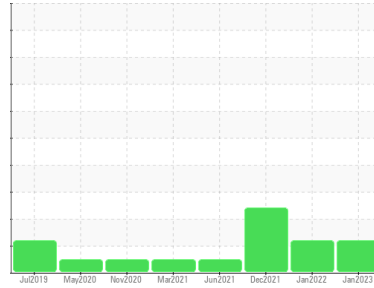
[view report](#)





# OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id  
**KENWORTH T880 T-858 (S/N 1XKZD40X5KJ371026)**

Component  
**Diesel Engine**

Fluid  
**DURALENE Dura-Max 15W40 (44 QTS)**

## 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

Sodium and/or potassium levels are high. Test for glycol is negative.

### ▲ 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>WC0693416</b>	WC0546600	WC0546574
Sample Date	Client Info		<b>25 Jan 2023</b>	26 Jan 2022	14 Dec 2021
Machine Age	mls	Client Info	<b>308361</b>	226131	218040
Oil Age	mls	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status			<b>ATTENTION</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	<b>42</b>	17	65
Chromium	ppm	ASTM D5185m >20	<b>1</b>	<1	2
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >20	<b>8</b>	4	14
Lead	ppm	ASTM D5185m >40	<b>14</b>	3	8
Copper	ppm	ASTM D5185m >330	<b>8</b>	2	2
Tin	ppm	ASTM D5185m >15	<b>2</b>	<1	2
Antimony	ppm	ASTM D5185m	<b>---</b>	<1	<1
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>&lt;1</b>	130	29
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>17</b>	138	300
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	<b>54</b>	48	48
Calcium	ppm	ASTM D5185m	<b>2479</b>	2426	2424
Phosphorus	ppm	ASTM D5185m	<b>860</b>	1001	899
Zinc	ppm	ASTM D5185m	<b>1129</b>	1126	1092
Sulfur	ppm	ASTM D5185m	<b>4138</b>	3525	3619

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>8</b>	16	24
Sodium	ppm	ASTM D5185m	<b>▲ 289</b>	▲ 1376	▲ 2143
Potassium	ppm	ASTM D5185m >20	<b>8</b>	14	▲ 40
Glycol	%	*ASTM D2982	<b>NEG</b>	NEG	NEG

## INFRA-RED

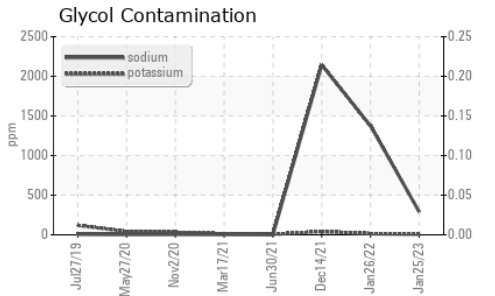
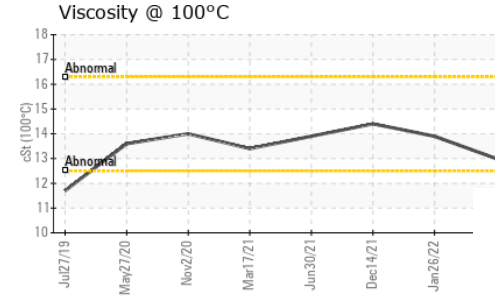
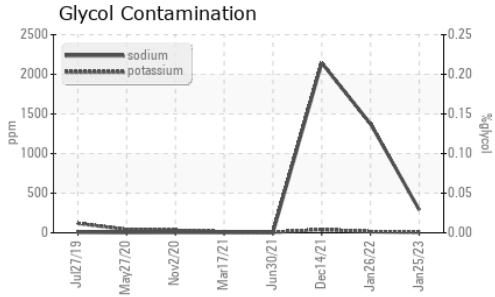
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	<b>0.6</b>	0.2	0.7
Nitration	Abs/cm	*ASTM D7624 >20	<b>12.2</b>	12.0	16.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>30.7</b>	22.7	31.2

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>22.1</b>	11.6	18.7
Base Number (BN)	mg KOH/g	ASTM D2896	<b>4.6</b>	10.0	10.5



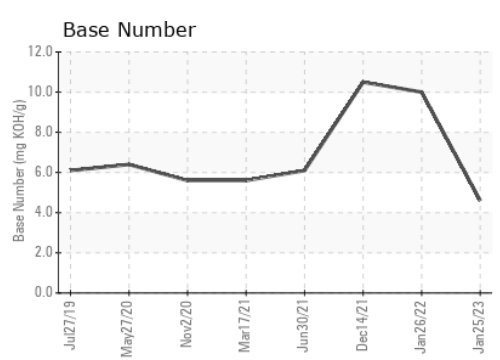
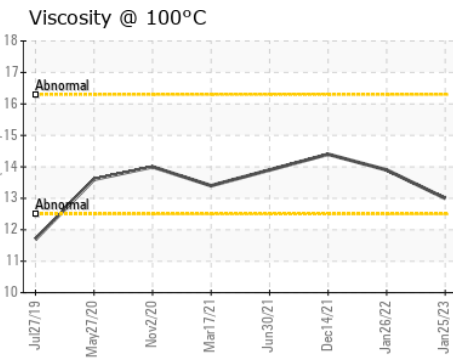
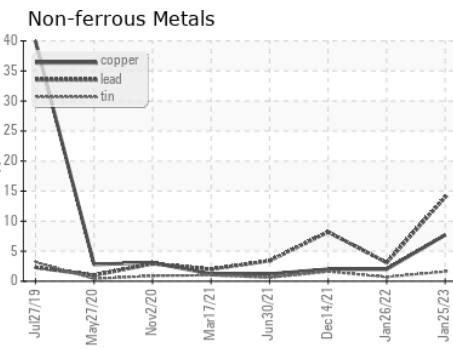
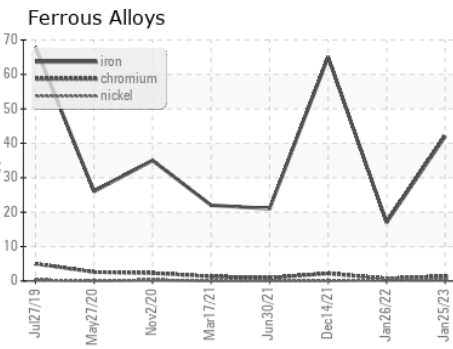
# OIL ANALYSIS REPORT



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	13.0	13.9	14.4

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0693416 **Received** : 03 Feb 2023  
**Lab Number** : 05758785 **Diagnosed** : 06 Feb 2023  
**Unique Number** : 10323392 **Diagnostician** : Doug Bogart  
**Test Package** : CONST ( Additional Tests: Glycol, TBN )

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

Certificate L2367  
 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:  
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