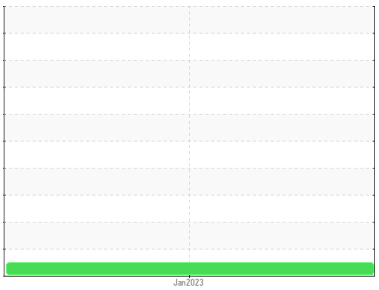
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
KENWORTH T880 T-883 (S/N 1XKZD40X6PJ225502)
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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	history 1	history 2
Sample Number		Client Info		**WC0693413**	---	---
Sample Date		Client Info		**13 Jan 2023**	---	---
Machine Age	mls	Client Info		**60474**	---	---
Oil Age	mls	Client Info		**0**	---	---
Oil Changed		Client Info		**Changed**	---	---
Sample Status				**NORMAL**	---	---

CONTAMINATION		method	limit/base	current	history 1	history 2
Fuel		WC Method	>5	**<1.0**	---	---
Glycol		WC Method		**NEG**	---	---

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>100	**28**	---	---
Chromium	ppm	ASTM D5185m	>20	**3**	---	---
Nickel	ppm	ASTM D5185m	>4	**1**	---	---
Titanium	ppm	ASTM D5185m		**0**	---	---
Silver	ppm	ASTM D5185m	>3	**<1**	---	---
Aluminum	ppm	ASTM D5185m	>20	**35**	---	---
Lead	ppm	ASTM D5185m	>40	**3**	---	---
Copper	ppm	ASTM D5185m	>330	**4**	---	---
Tin	ppm	ASTM D5185m	>15	**2**	---	---
Vanadium	ppm	ASTM D5185m		**0**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	250	**2**	---	---
Barium	ppm	ASTM D5185m	10	**0**	---	---
Molybdenum	ppm	ASTM D5185m	100	**4**	---	---
Manganese	ppm	ASTM D5185m		**1**	---	---
Magnesium	ppm	ASTM D5185m	450	**89**	---	---
Calcium	ppm	ASTM D5185m	3000	**2207**	---	---
Phosphorus	ppm	ASTM D5185m	1150	**783**	---	---
Zinc	ppm	ASTM D5185m	1350	**1015**	---	---
Sulfur	ppm	ASTM D5185m	4250	**3831**	---	---

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	**10**	---	---
Sodium	ppm	ASTM D5185m	>158	**2**	---	---
Potassium	ppm	ASTM D5185m	>20	**67**	---	---

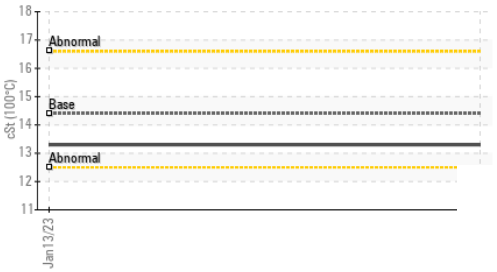
INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	>3	**0.3**	---	---
Nitration	Abs/cm	*ASTM D7624	>20	**8.7**	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	**22.8**	---	---

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**14.2**	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	**5.4**	---	---

OIL ANALYSIS REPORT

Base Number

Viscosity @ 100°C

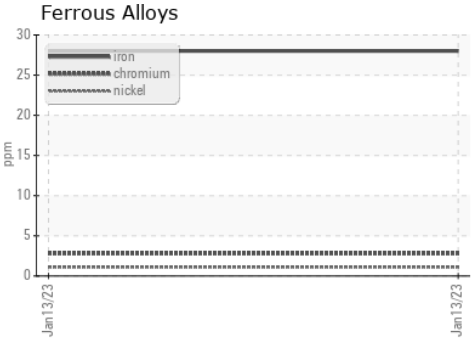


VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	---	---
Appearance	scalar	*Visual	NORML	**NORML**	---	---
Odor	scalar	*Visual	NORML	**NORML**	---	---
Emulsified Water	scalar	*Visual	>0.2	**NEG**	---	---
Free Water	scalar	*Visual		**NEG**	---	---

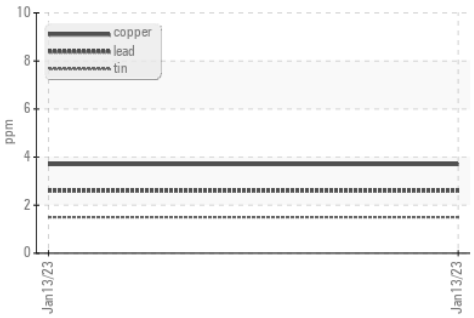
FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	14.4	**13.3**	---	---

GRAPHS

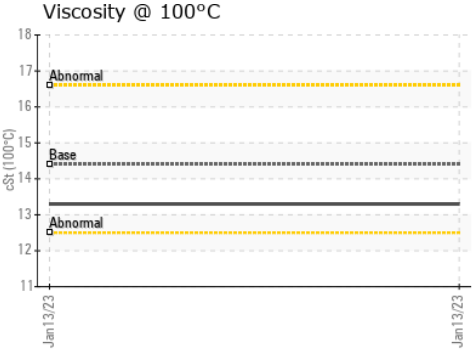
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0693413 **Received** : 03 Feb 2023
Lab Number : 05758788 **Diagnosed** : 06 Feb 2023
Unique Number : 10323395 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: TBN)

EAI EQUIPMENT A DIIV 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: