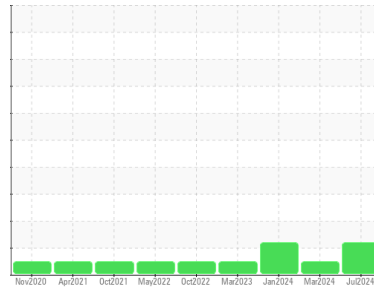




# OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Machine Id  
**KENWORTH T880 T-868 (S/N 1NKZXPEX3LJ391742)**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

The oil 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

There is no indication of any contamination in the oil.

### Fluid Condition

The BN level is low. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0804131</b>	WC0865122	WC0865127
Sample Date	Client Info		<b>03 Jul 2024</b>	04 Mar 2024	22 Jan 2024
Machine Age	mls	Client Info	<b>291801</b>	162560	127696
Oil Age	mls	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>57</b>	27	43
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >20	<b>7</b>	4	13
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	4	3
Copper	ppm	ASTM D5185m >330	<b>3</b>	2	4
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	1	2
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	<b>0</b>	<1	3
Barium	ppm	ASTM D5185m 10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 100	<b>2</b>	4	4
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m 450	<b>63</b>	50	52
Calcium	ppm	ASTM D5185m 3000	<b>2637</b>	2416	2459
Phosphorus	ppm	ASTM D5185m 1150	<b>1078</b>	965	1064
Zinc	ppm	ASTM D5185m 1350	<b>1203</b>	1132	1118
Sulfur	ppm	ASTM D5185m 4250	<b>3809</b>	3814	3462

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>8</b>	7	10
Sodium	ppm	ASTM D5185m >158	<b>3</b>	7	4
Potassium	ppm	ASTM D5185m >20	<b>6</b>	6	9

## INFRA-RED

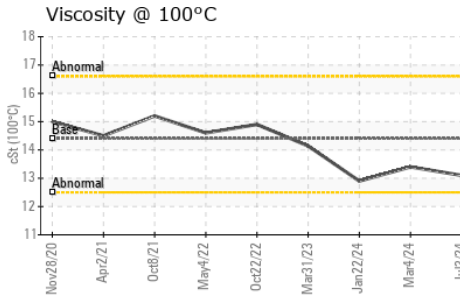
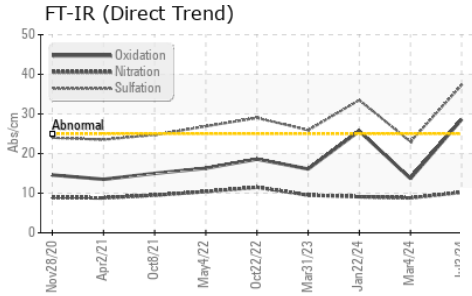
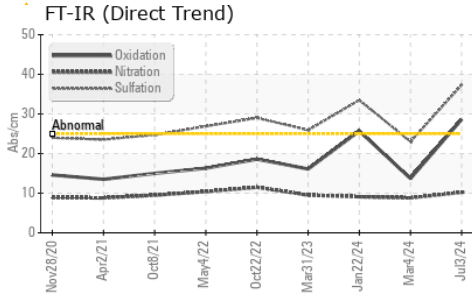
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>2</b>	0.4	1.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.2</b>	8.8	9.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>37.3</b>	23.0	33.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>28.6</b>	13.7	25.7
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	<b>▲ 3.1</b>	4.7	▲ 3.2



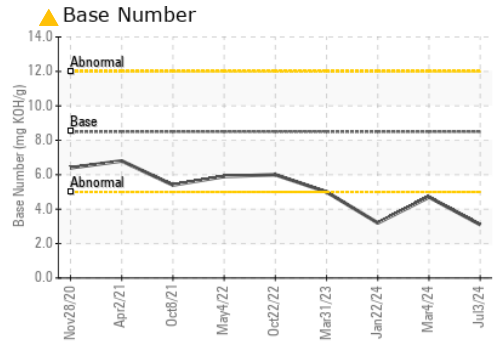
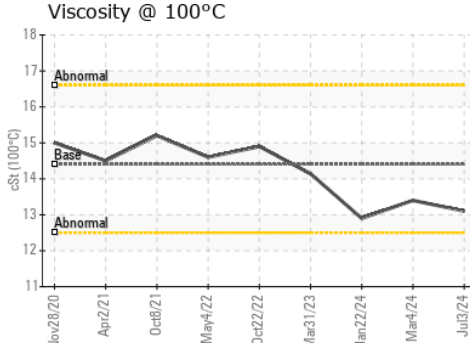
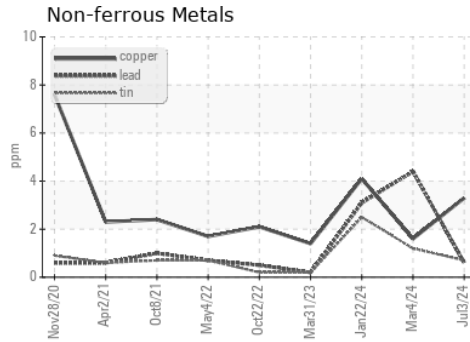
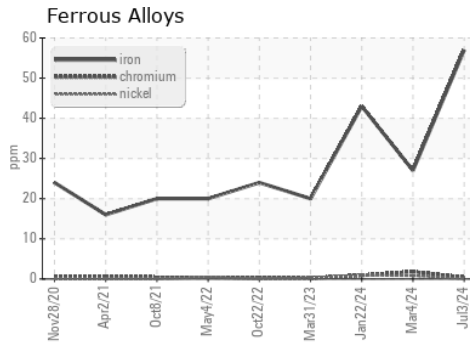
# OIL ANALYSIS REPORT



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	14.4	13.1	13.4	12.9

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : WC0804131

**Lab Number** : 06237393

**Unique Number** : 11126227

**Test Package** : CONST ( Additional Tests: TBN )

**Received** : 15 Jul 2024

**Tested** : 17 Jul 2024

**Diagnosed** : 17 Jul 2024 - Don Baldrige

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)

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F: