



# OIL ANALYSIS REPORT

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

Machine Id  
**KENWORTH FT-146**  
Component  
**Diesel Engine**  
Fluid  
**UNITED OIL DURALENE (40 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DC0032188</b>	DC0030778	DC0029765
Sample Date		Client Info		<b>29 Dec 2023</b>	12 Oct 2023	15 Aug 2023
Machine Age	mls	Client Info		<b>961330</b>	949235	937538
Oil Age	mls	Client Info		<b>12095</b>	11697	11506
Filter Age	mls	Client Info		<b>12095</b>	11697	11506
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>14</b>	26	27
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	2	4
Lead	ppm	ASTM D5185m	>40	<b>4</b>	4	6
Copper	ppm	ASTM D5185m	>330	<b>4</b>	11	37
Tin	ppm	ASTM D5185m	>15	<b>1</b>	2	4
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

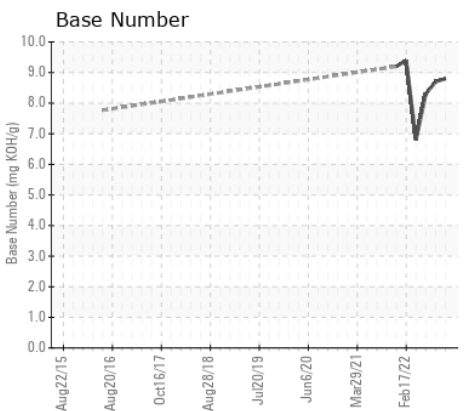
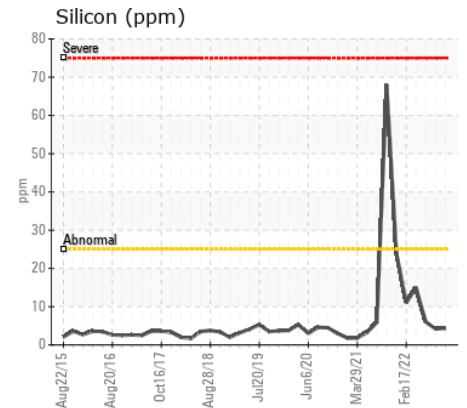
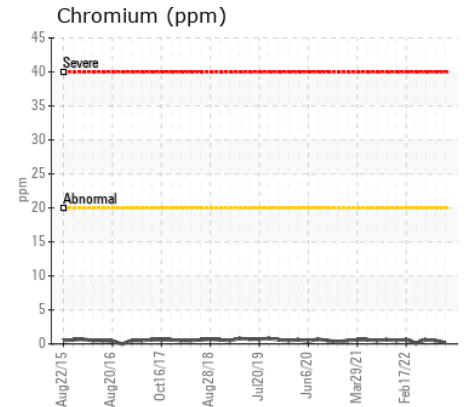
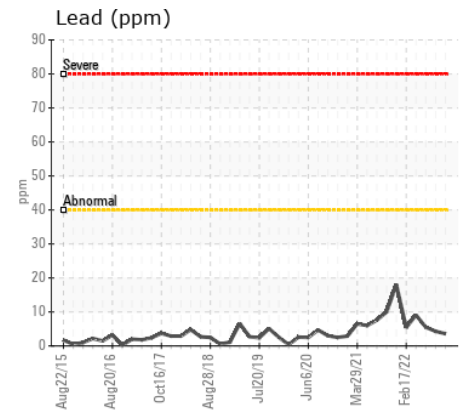
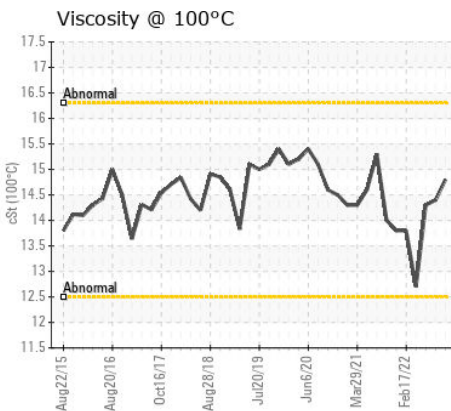
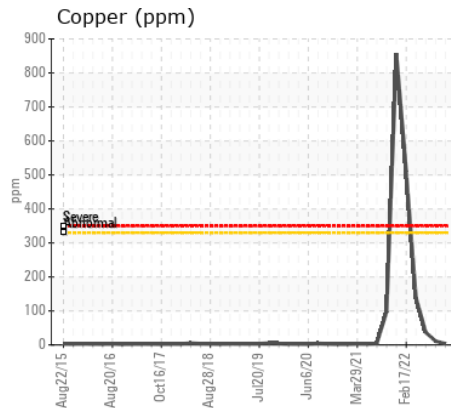
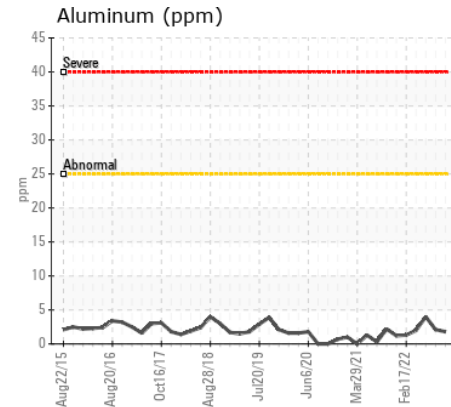
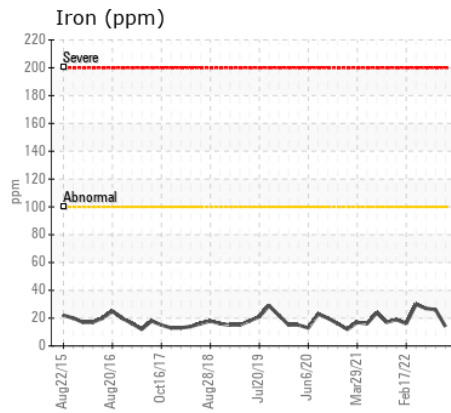
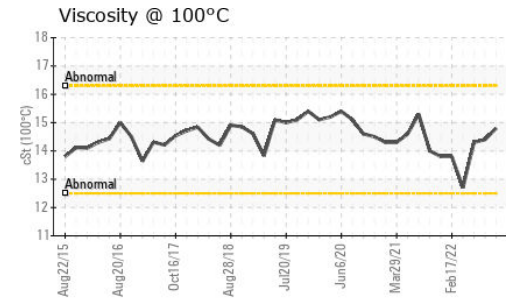
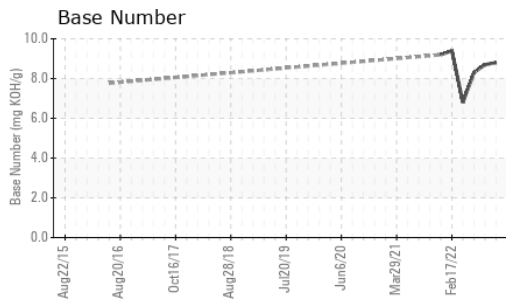
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	6
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	2
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>0.3</b>	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	8.5	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.1</b>	20.6	20.9
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>&lt;1</b>	2	3
Boron	ppm	ASTM D5185m		<b>5</b>	3	3
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>54</b>	57	57
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>940</b>	933	918
Calcium	ppm	ASTM D5185m		<b>1120</b>	1248	1282
Phosphorus	ppm	ASTM D5185m		<b>1081</b>	1062	1057
Zinc	ppm	ASTM D5185m		<b>1328</b>	1290	1312
Sulfur	ppm	ASTM D5185m		<b>3233</b>	3166	3749
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.4</b>	16.6	16.2
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.8</b>	8.7	8.3
Visc @ 100°C	cSt	ASTM D445		<b>14.8</b>	14.4	14.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0032188 **Received** : 18 Jan 2024  
**Lab Number** : 06064921 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10836303 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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)

**FORRY TRANSPORT INC.**  
 1477 CARLISLE PIKE  
 HANOVER, PA  
 US 17331  
 Contact: WILLIE FORRY  
 willie@forrytrans.com  
 T: (717)632-7864  
 F: (717)632-7695