



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**KENWORTH 365 (S/N 1XKWP4TX9PR247596)**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0893911</b>	WC0867913	WC0788808
Sample Date		Client Info		<b>17 Jun 2024</b>	26 Dec 2023	23 Mar 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>28</b>	20	34
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>15</b>	9	25
Lead	ppm	ASTM D5185m	>40	<b>3</b>	2	2
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	0	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	2
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

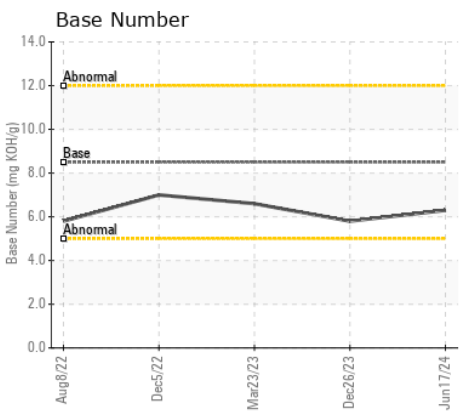
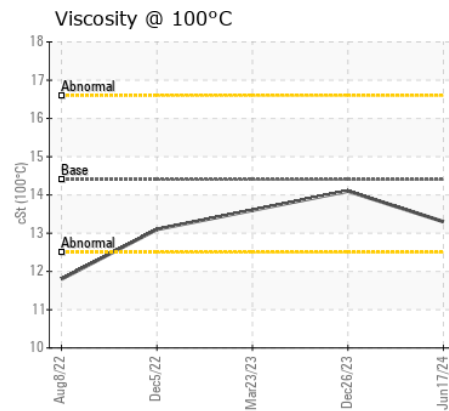
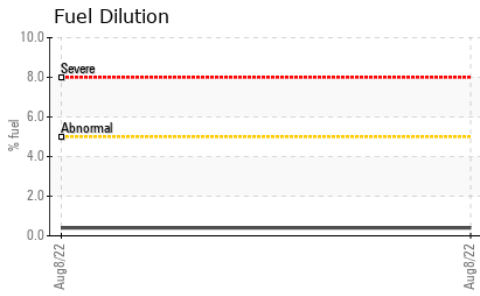
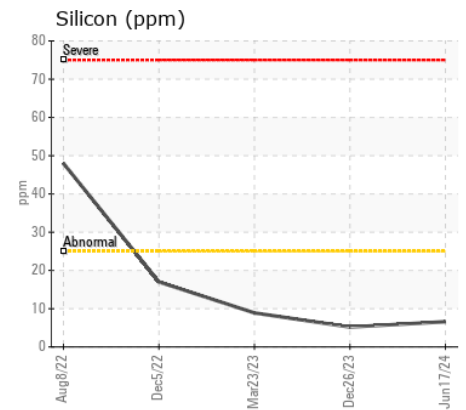
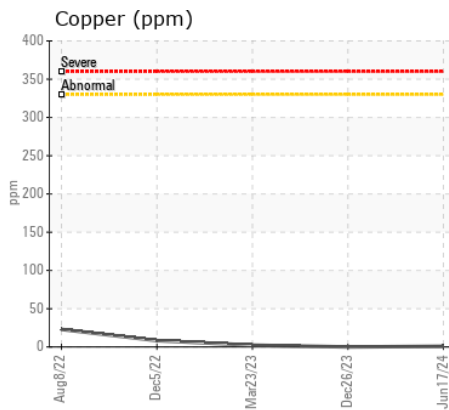
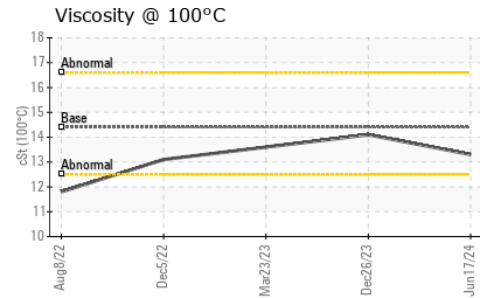
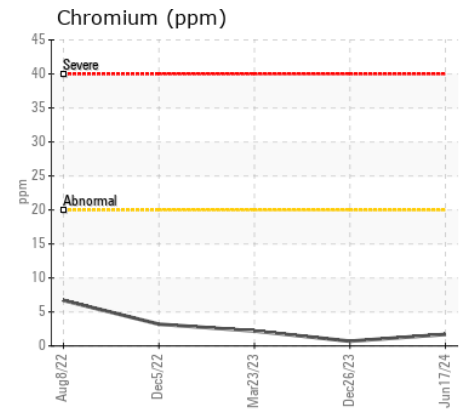
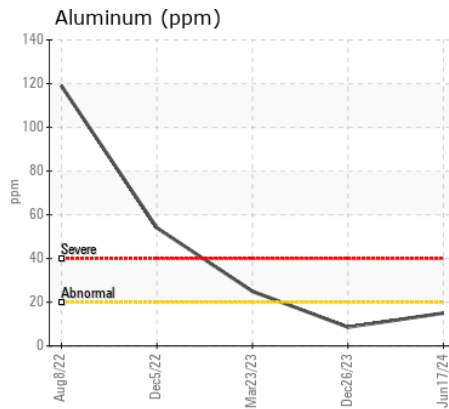
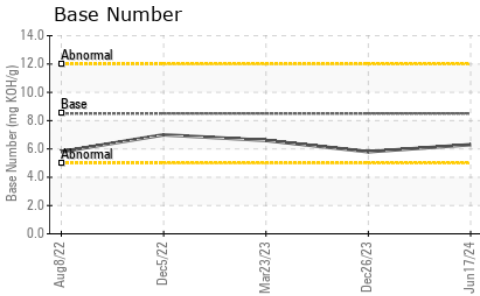
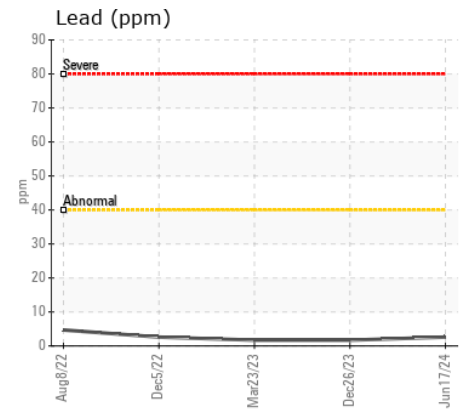
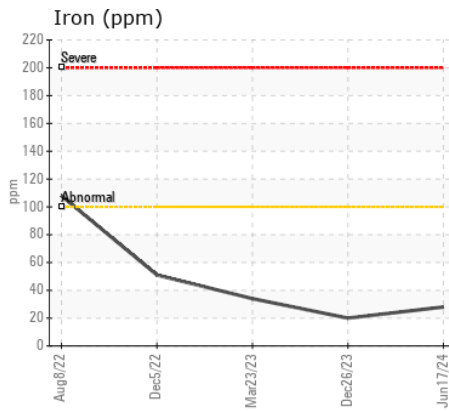
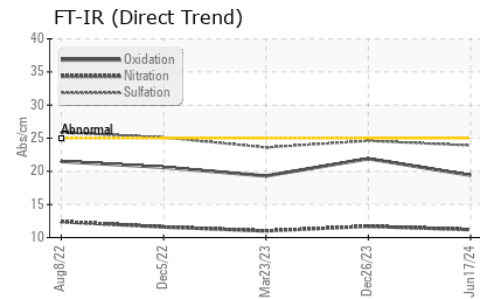
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	5	9
Potassium	ppm	ASTM D5185m	>20	<b>39</b>	21	60
Fuel	%	ASTM D3524	>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>1.2</b>	1.1	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.2</b>	11.7	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.9</b>	24.6	23.6
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	>216	<b>0</b>	0	1
Boron	ppm	ASTM D5185m	250	<b>3</b>	1	2
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>65</b>	56	62
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>938</b>	937	981
Calcium	ppm	ASTM D5185m	3000	<b>1144</b>	1020	1152
Phosphorus	ppm	ASTM D5185m	1150	<b>1055</b>	1046	1039
Zinc	ppm	ASTM D5185m	1350	<b>1314</b>	1313	1304
Sulfur	ppm	ASTM D5185m	4250	<b>2883</b>	2904	2654
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.4</b>	21.9	19.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>6.3</b>	5.8	6.6
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.3</b>	14.1	13.6



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0893911 **Received** : 20 Jun 2024  
**Lab Number** : 06216443 **Tested** : 23 Jun 2024  
**Unique Number** : 11089307 **Diagnosed** : 23 Jun 2024 - Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, 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)

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