



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH 331
 Component
Diesel Engine
 Fluid
SERVICE PRO 15W40 SYN BLEND (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RW0005400	RW0004772	RW0004766
Sample Date		Client Info		06 May 2024	27 Feb 2024	11 Dec 2023
Machine Age	mls	Client Info		282592	266971	250377
Oil Age	mls	Client Info		15621	16594	17450
Filter Age	mls	Client Info		15621	16594	17450
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	28	32	30
Chromium	ppm	ASTM D5185m	>5	<1	1	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	6	6	5
Lead	ppm	ASTM D5185m	>150	2	2	2
Copper	ppm	ASTM D5185m	>90	0	1	<1
Tin	ppm	ASTM D5185m	>5	1	<1	1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

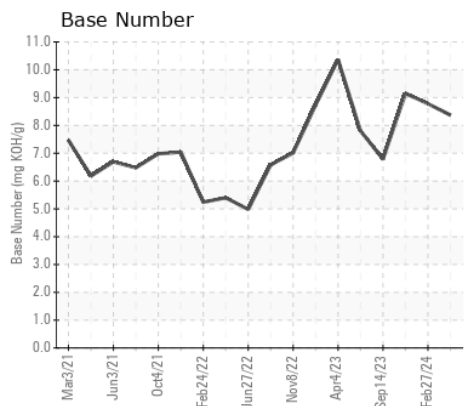
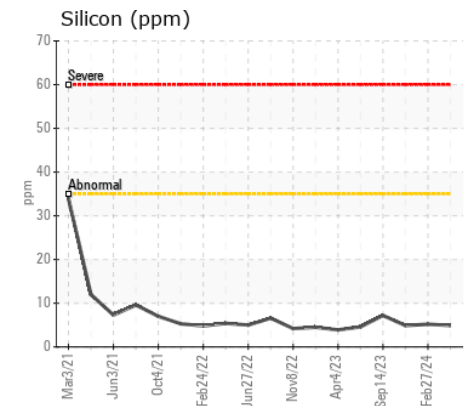
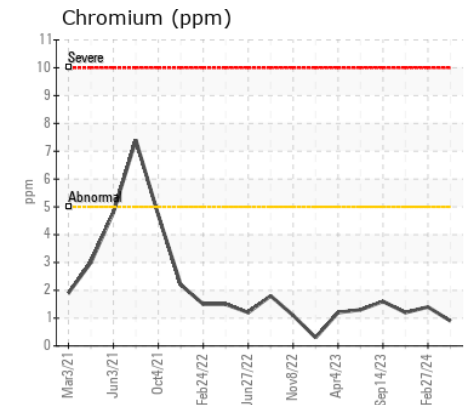
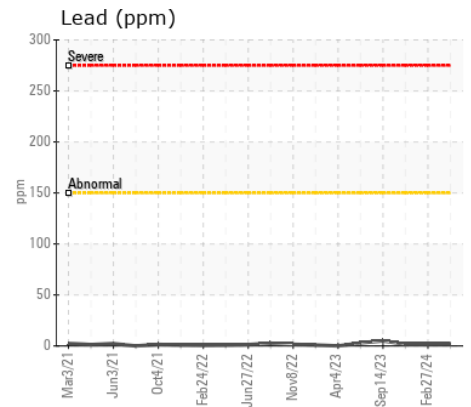
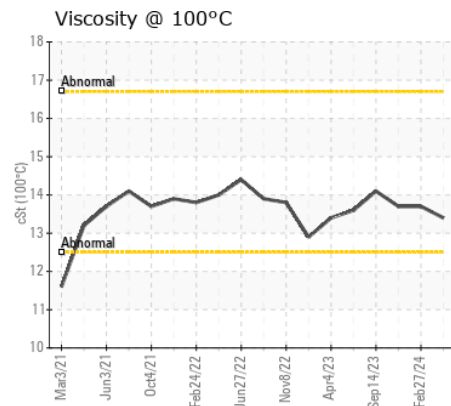
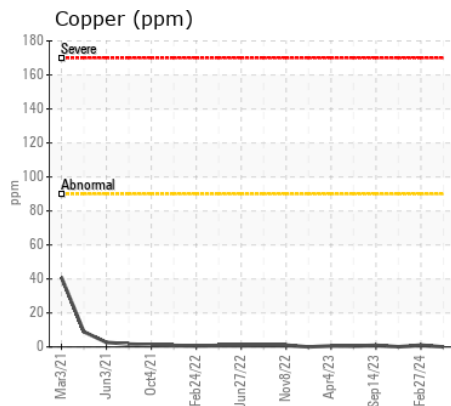
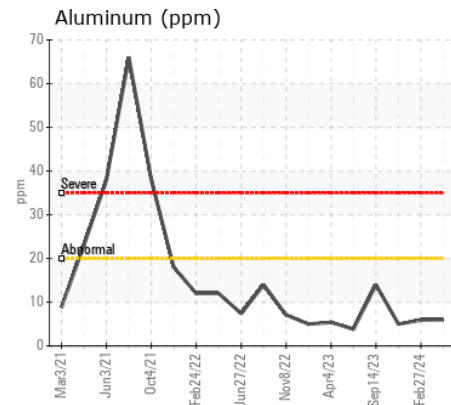
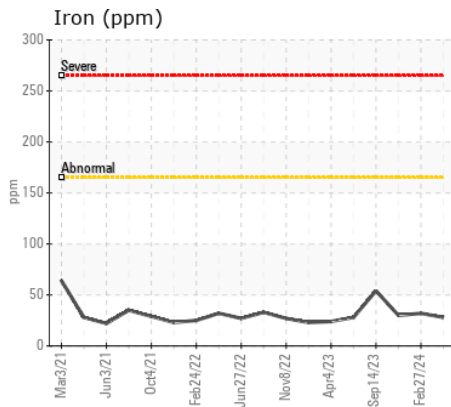
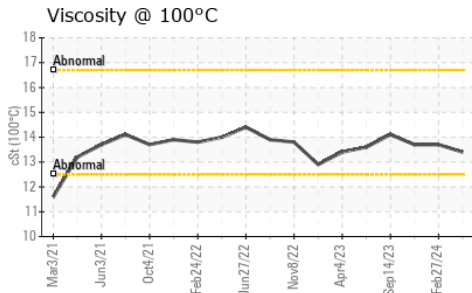
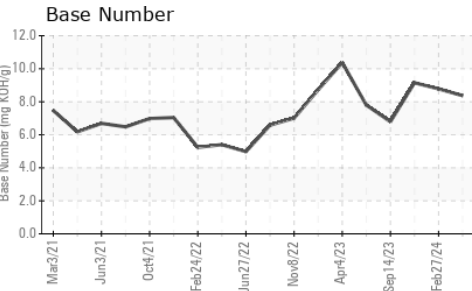
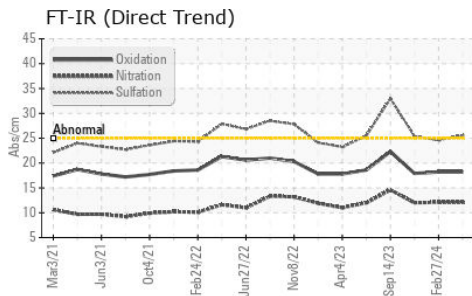
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	5	5	5
Potassium	ppm	ASTM D5185m	>20	6	7	3
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	2.1	2	2.2
Nitration	Abs/cm	*ASTM D7624	>20	12.1	12.1	12.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.6	24.6	25.4
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	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		3	2	2
Boron	ppm	ASTM D5185m		8	2	2
Barium	ppm	ASTM D5185m		1	1	0
Molybdenum	ppm	ASTM D5185m		66	66	64
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		915	962	986
Calcium	ppm	ASTM D5185m		1193	1179	1237
Phosphorus	ppm	ASTM D5185m		1104	1142	1041
Zinc	ppm	ASTM D5185m		1286	1285	1272
Sulfur	ppm	ASTM D5185m		3378	3180	3008
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.2	18.2	17.9
Base Number (BN)	mg KOH/g	ASTM D2896		8.37	8.78	9.15
Visc @ 100°C	cSt	ASTM D445		13.4	13.7	13.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0005400
Lab Number : 06177899
Unique Number : 11029225
Test Package : MOB 2

Received : 13 May 2024
Tested : 14 May 2024
Diagnosed : 14 May 2024 - Wes Davis

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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)