



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[Z20825]

Machine Id

KENWORTH TLL 25

Component

Front Diesel Engine

Fluid

VALVOLINE 15W40 (47 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC06176869	WC06067285	WC06047303
Sample Date		Client Info		16 Apr 2024	27 Dec 2023	05 Dec 2023
Machine Age	kms	Client Info		972637	910450	900033
Oil Age	kms	Client Info		62187	10417	48638
Filter Age	kms	Client Info		62187	10417	48638
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	19	4	16
Chromium	ppm	ASTM D5185m	>20	2	<1	1
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	1	2
Lead	ppm	ASTM D5185m	>40	8	<1	2
Copper	ppm	ASTM D5185m	>330	2	<1	1
Tin	ppm	ASTM D5185m	>15	2	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

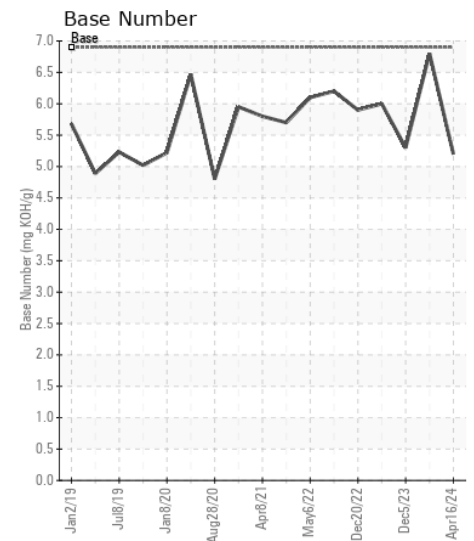
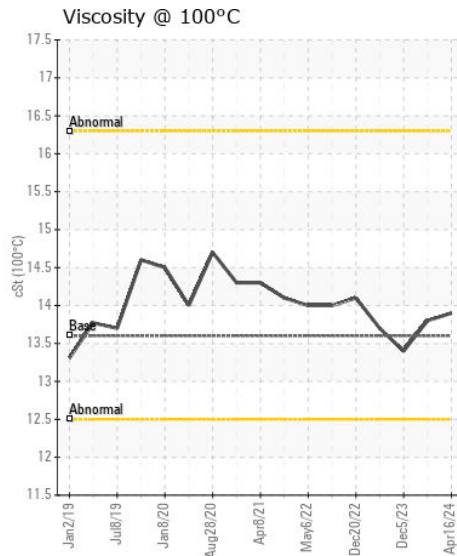
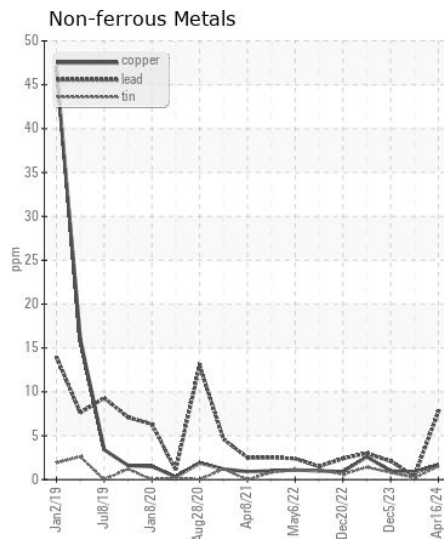
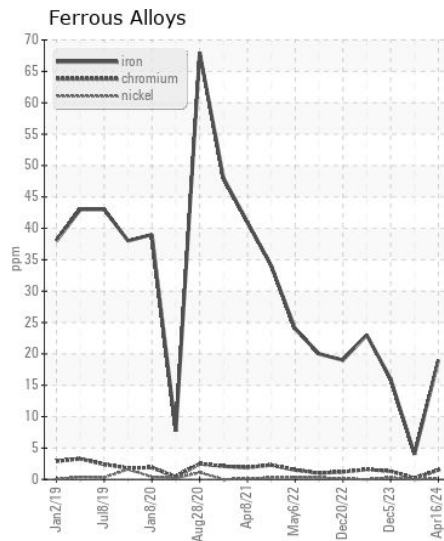
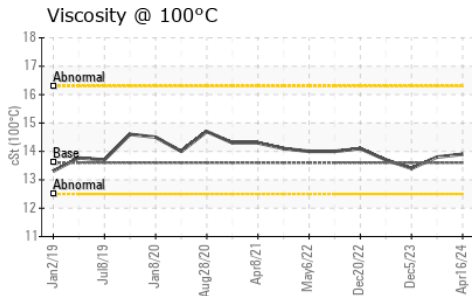
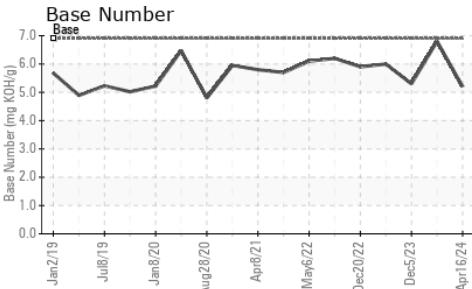
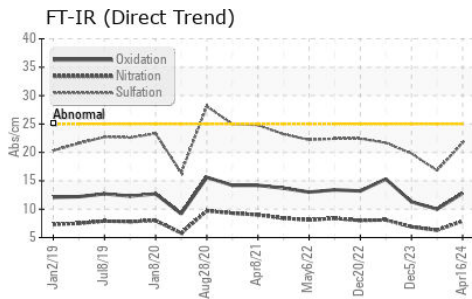
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	5	3
Potassium	ppm	ASTM D5185m	>20	5	0	4
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	>6	0.5	0.2	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.9	6.3	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	16.8	19.8
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		0	<1	1
Boron	ppm	ASTM D5185m	39	1	7	7
Barium	ppm	ASTM D5185m	1	1	0	10
Molybdenum	ppm	ASTM D5185m	49	3	4	3
Manganese	ppm	ASTM D5185m	1	<1	<1	<1
Magnesium	ppm	ASTM D5185m	616	24	49	39
Calcium	ppm	ASTM D5185m	1554	2630	2229	2241
Phosphorus	ppm	ASTM D5185m	899	1012	840	868
Zinc	ppm	ASTM D5185m	1069	1139	1067	1091
Sulfur	ppm	ASTM D5185m	2624	3953	3527	3441
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.8	10.0	11.3
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	5.2	6.8	5.3
Visc @ 100°C	cSt	ASTM D445	13.6	13.9	13.8	13.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06176869
Lab Number : 06176869
Unique Number : 11022922
Test Package : FLEET
Received : 13 May 2024
Tested : 14 May 2024
Diagnosed : 14 May 2024 - Wes Davis

TRANZLIQUID
 81 HEWLETTS RD
 MOUNT MAUNGANUI, ZZ
 NZ
 Contact: AARON LOYE
 aaron@truckline.co.nz
 T:
 F:

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)