



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[Z20812]

Machine Id

KENWORTH TLL 10 - 79968044

Component

Front Diesel Engine

Fluid

VALVOLINE PREMIUM BLUE (49 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC06189885	WC05977554	WC05638017
Sample Date		Client Info		10 May 2024	15 Sep 2023	29 Aug 2022
Machine Age	kms	Client Info		851841	789962	718291
Oil Age	kms	Client Info		61879	71671	52387
Filter Age	kms	Client Info		61879	71671	52387
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	46	50	30
Chromium	ppm	ASTM D5185m	>5	3	2	2
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	4	6	3
Lead	ppm	ASTM D5185m	>150	11	7	6
Copper	ppm	ASTM D5185m	>90	4	9	2
Tin	ppm	ASTM D5185m	>5	3	3	1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

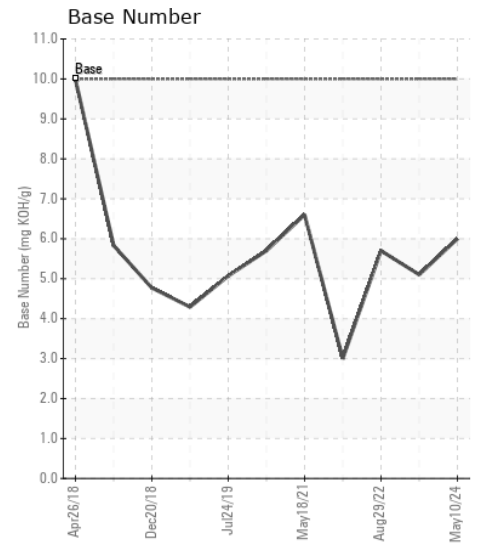
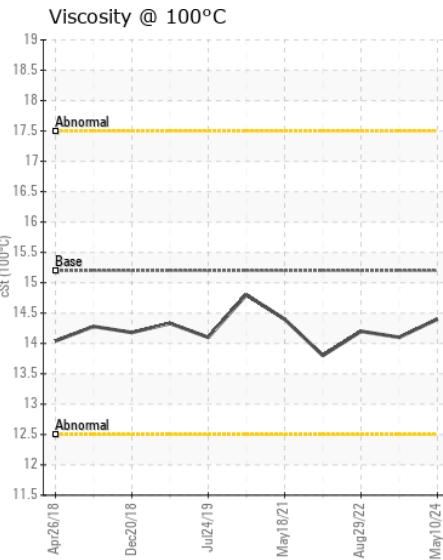
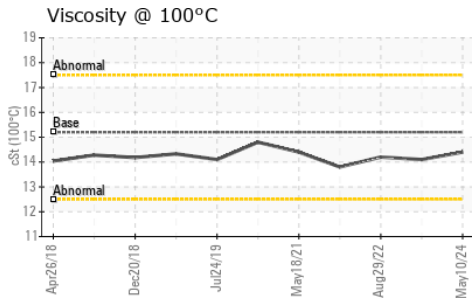
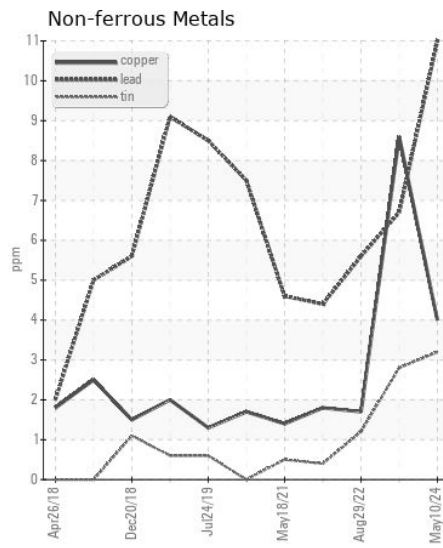
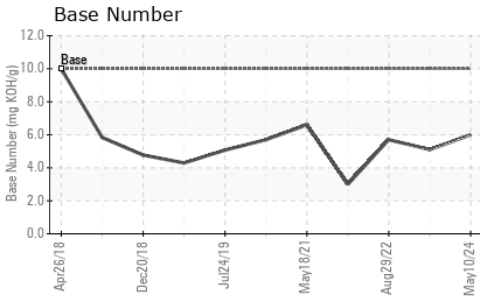
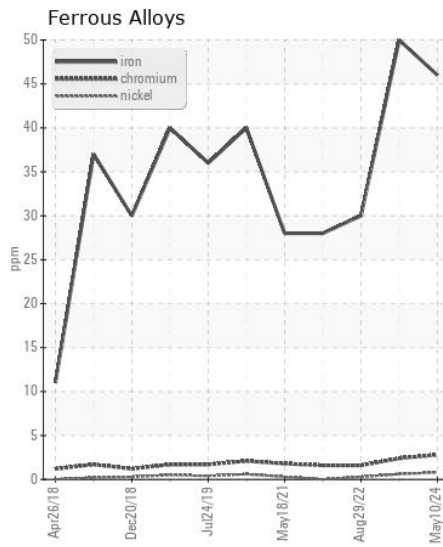
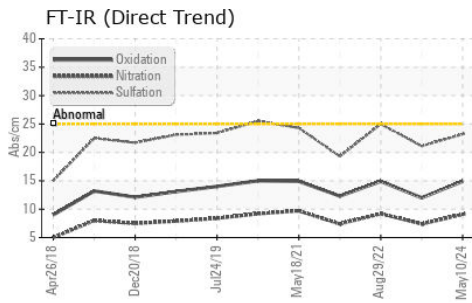
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	14	40	4
Potassium	ppm	ASTM D5185m	>20	4	7	2
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	0.8	0.6	0.9
Nitration	Abs/cm	*ASTM D7624	>20	9.1	7.4	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	21.1	25.0
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		2	9	1
Boron	ppm	ASTM D5185m	2.9	2	5	5
Barium	ppm	ASTM D5185m	0.1	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	3	4	2
Manganese	ppm	ASTM D5185m		1	3	<1
Magnesium	ppm	ASTM D5185m	18	23	27	21
Calcium	ppm	ASTM D5185m	2936	2820	2381	2374
Phosphorus	ppm	ASTM D5185m	998	1097	932	874
Zinc	ppm	ASTM D5185m	1095	1273	1150	1085
Sulfur	ppm	ASTM D5185m	5469	4142	3365	3197
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	12.0	14.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.0	6.0	5.1	5.7
Visc @ 100°C	cSt	ASTM D445	15.2	14.4	14.1	14.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06189885
Lab Number : 06189885
Unique Number : 11046637
Test Package : FLEET

Received : 23 May 2024
Tested : 25 May 2024
Diagnosed : 25 May 2024 - Wes Davis

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

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: