



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[Z20800]

Machine Id
KENWORTH TLL 41

Component
Front Diesel Engine

Fluid
VALVOLINE PREMIUM BLUE (48 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC06189900	WC06047319	WC05924478
Sample Date		Client Info		06 May 2024	18 Dec 2023	10 Aug 2023
Machine Age	kms	Client Info		504048	431465	371748
Oil Age	kms	Client Info		72583	69013	9296
Filter Age	kms	Client Info		72583	69013	9296
Oil Changed		Client Info		Changed	Changed	Not 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	>100	60	46	9
Chromium	ppm	ASTM D5185m	>20	4	4	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	5	4	<1
Lead	ppm	ASTM D5185m	>40	5	3	<1
Copper	ppm	ASTM D5185m	>330	4	2	<1
Tin	ppm	ASTM D5185m	>15	2	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

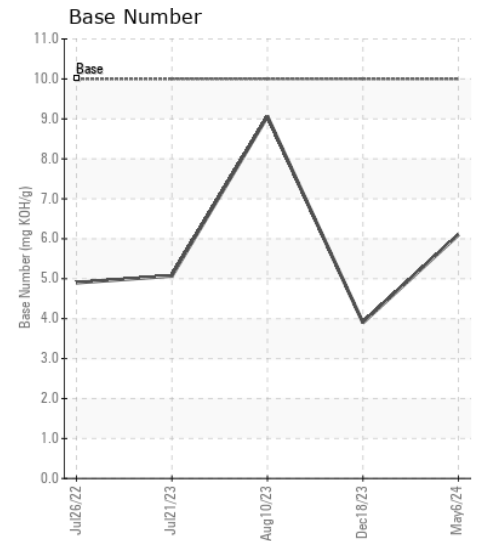
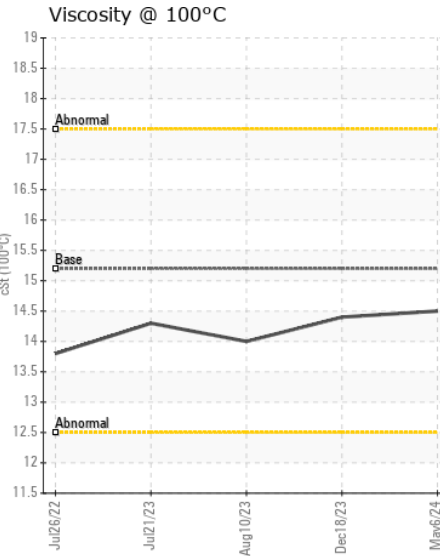
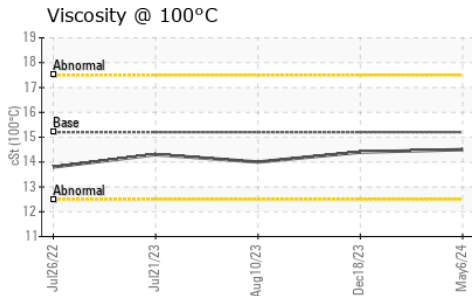
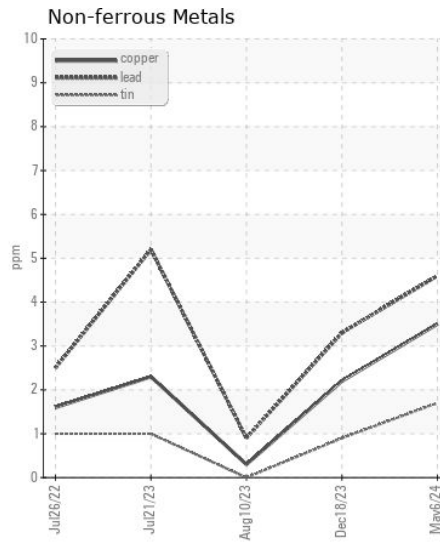
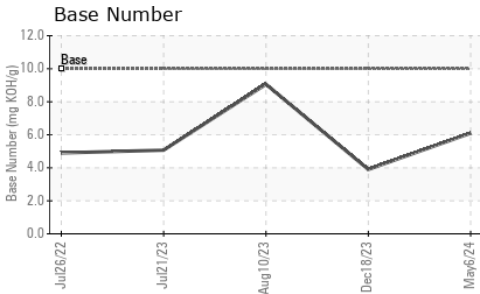
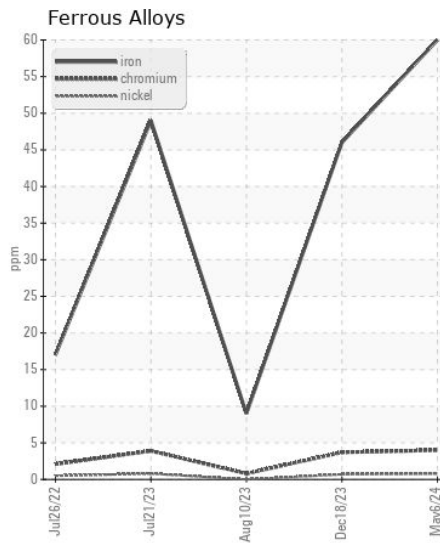
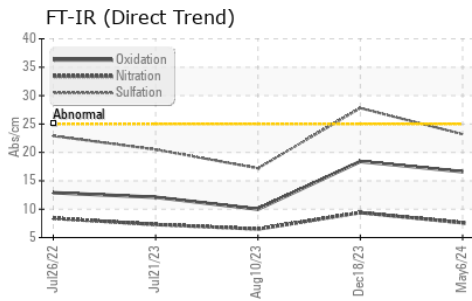
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	4	3
Potassium	ppm	ASTM D5185m	>20	11	9	4
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.9	1.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.6	9.4	6.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	27.8	17.2
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		4	3	2
Boron	ppm	ASTM D5185m	2.9	6	3	2
Barium	ppm	ASTM D5185m	0.1	0	10	0
Molybdenum	ppm	ASTM D5185m	0.0	4	<1	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	18	40	20	13
Calcium	ppm	ASTM D5185m	2936	2813	2538	2581
Phosphorus	ppm	ASTM D5185m	998	1064	945	992
Zinc	ppm	ASTM D5185m	1095	1263	1151	1226
Sulfur	ppm	ASTM D5185m	5469	3990	3605	4716
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	18.4	10.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.0	6.1	3.9	9.06
Visc @ 100°C	cSt	ASTM D445	15.2	14.5	14.4	14.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06189900
Lab Number : 06189900
Unique Number : 11046652
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
 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)