



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH 104
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (44 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0844112	WC0778914	WC0778926
Sample Date		Client Info		11 Jun 2024	24 Jun 2023	20 Mar 2023
Machine Age	hrs	Client Info		19147	18986	17328
Oil Age	hrs	Client Info		450	500	450
Filter Age	hrs	Client Info		450	500	450
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	34	29	27
Chromium	ppm	ASTM D5185m	>5	1	1	1
Nickel	ppm	ASTM D5185m	>4	1	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	6	9	5
Lead	ppm	ASTM D5185m	>150	5	7	3
Copper	ppm	ASTM D5185m	>90	3	2	2
Tin	ppm	ASTM D5185m	>5	<1	1	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

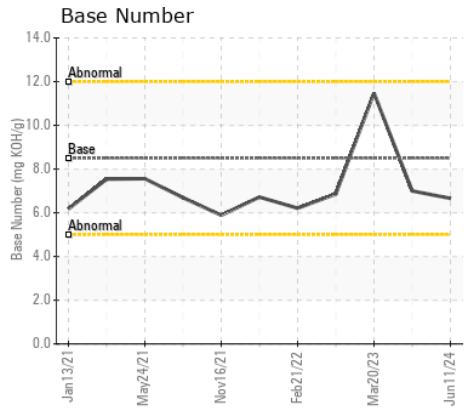
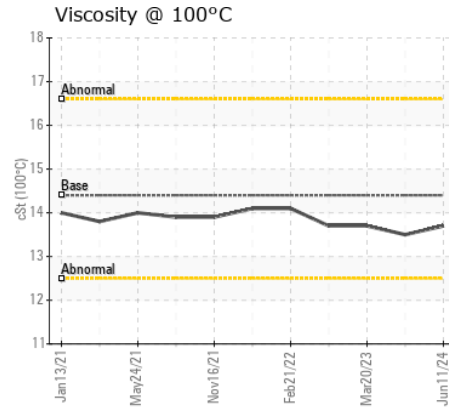
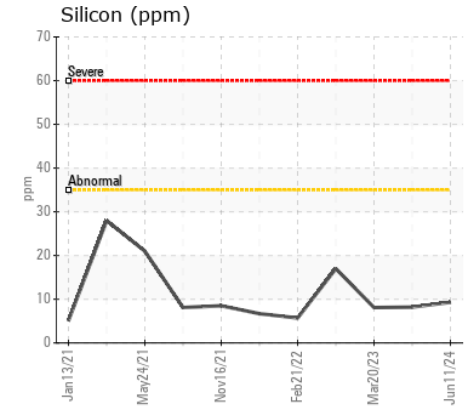
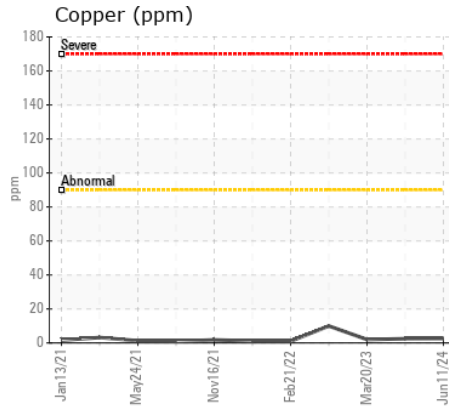
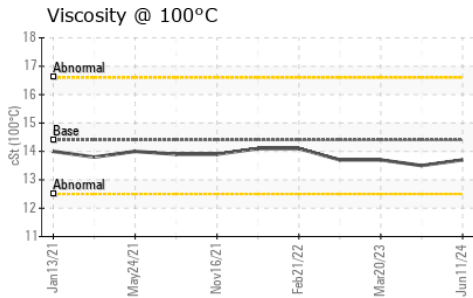
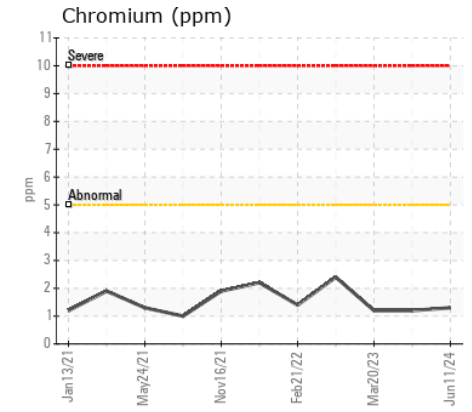
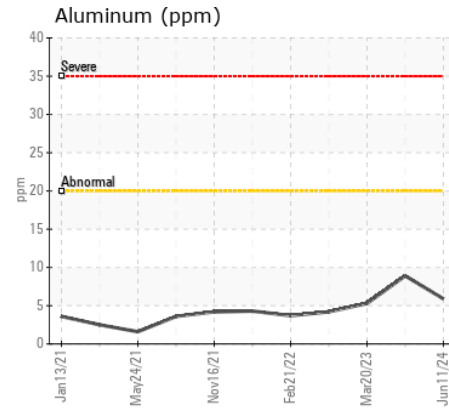
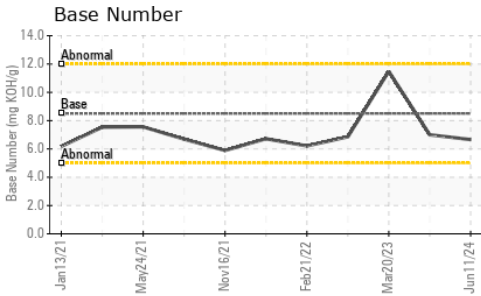
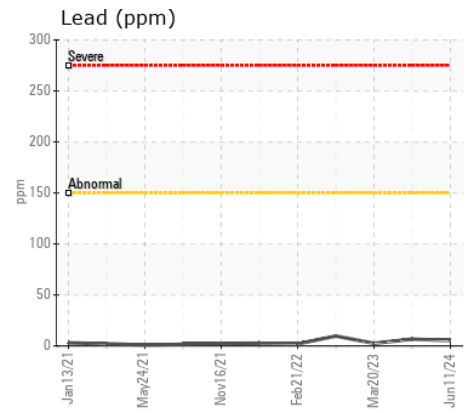
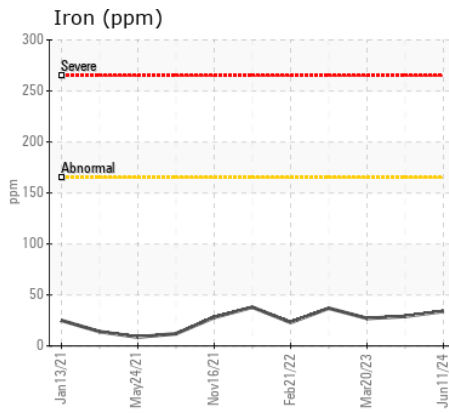
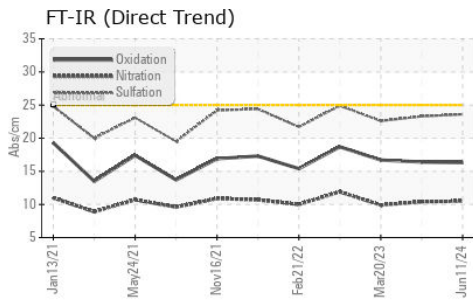
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	9	8	8
Potassium	ppm	ASTM D5185m	>20	6	6	5
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	0.7	0.8	0.7
Nitration	Abs/cm	*ASTM D7624	>20	10.5	10.4	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.6	23.3	22.6
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	>158	4	1	3
Boron	ppm	ASTM D5185m	250	26	24	30
Barium	ppm	ASTM D5185m	10	0	<1	0
Molybdenum	ppm	ASTM D5185m	100	0	2	5
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	450	778	805	801
Calcium	ppm	ASTM D5185m	3000	1416	1559	1464
Phosphorus	ppm	ASTM D5185m	1150	785	793	767
Zinc	ppm	ASTM D5185m	1350	875	947	936
Sulfur	ppm	ASTM D5185m	4250	3471	3419	3584
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	16.4	16.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.66	7.00	11.48
Visc @ 100°C	cSt	ASTM D445	14.4	13.7	13.5	13.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0844112
Lab Number : 06211953
Unique Number : 11084817
Test Package : MOB 2

Received : 17 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 19 Jun 2024 - Wes Davis

LYNDEN TRANSPORT - FIFE
 5410 12TH STREET EAST
 FIFE, WA
 US 98424

Contact: CHESTER ANGLEMYER
 chestera@ltia.lynden.com

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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