



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH 767
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (20 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0844183	WC0778981	WC0778907
Sample Date		Client Info		08 Feb 2024	22 Sep 2023	30 May 2023
Machine Age	hrs	Client Info		13283	12480	11842
Oil Age	hrs	Client Info		450	450	450
Filter Age	hrs	Client Info		450	0	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	>100	24	38	26
Chromium	ppm	ASTM D5185m	>20	<1	2	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	3	<1
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	2	<1	2
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

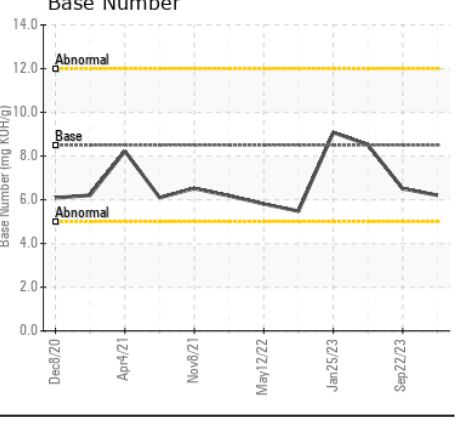
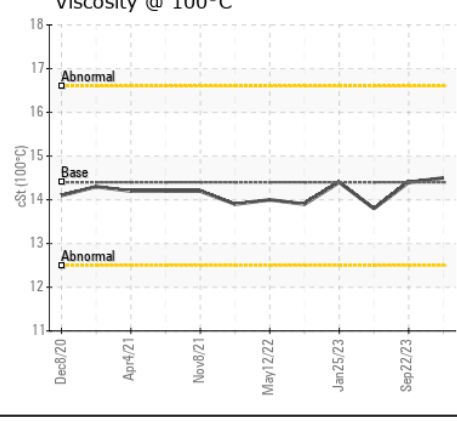
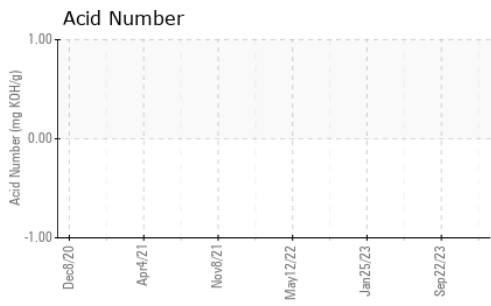
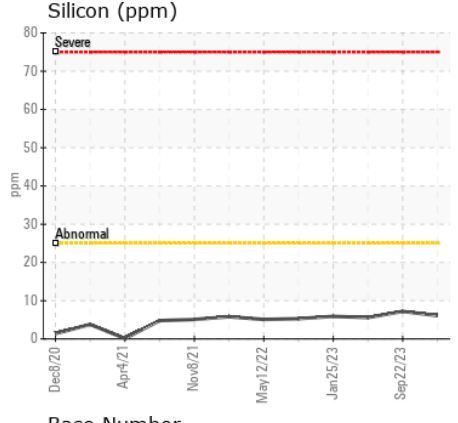
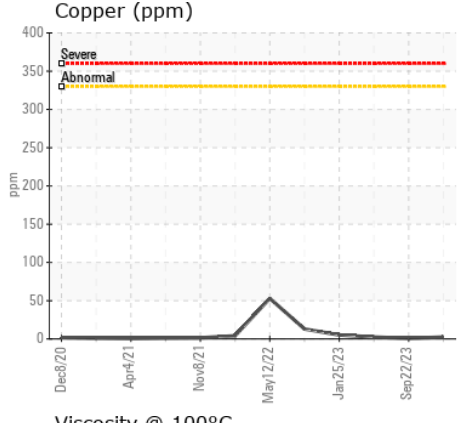
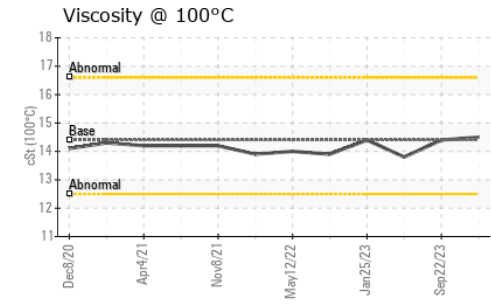
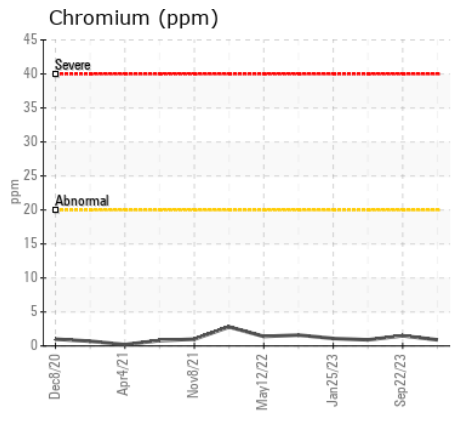
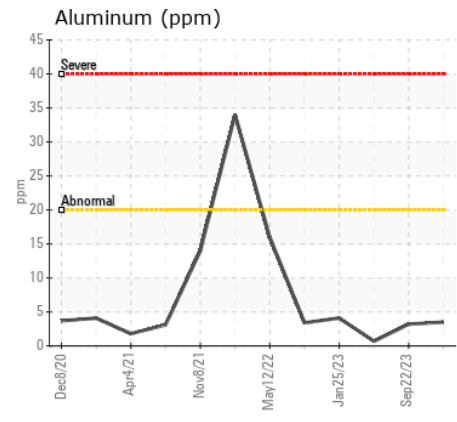
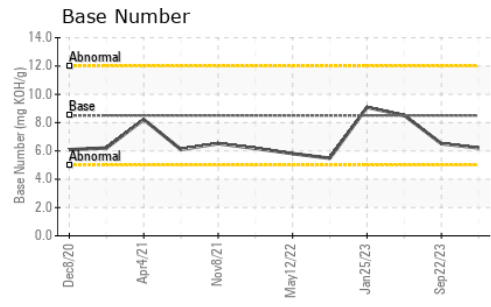
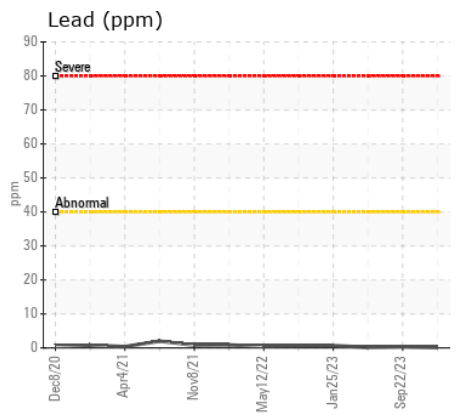
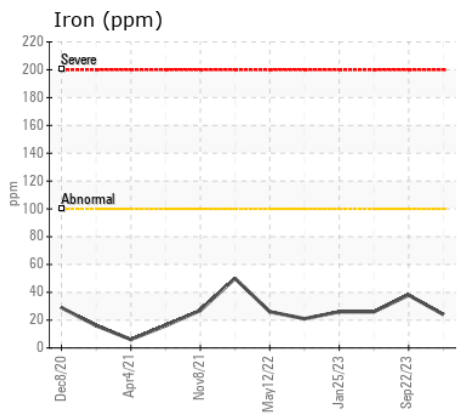
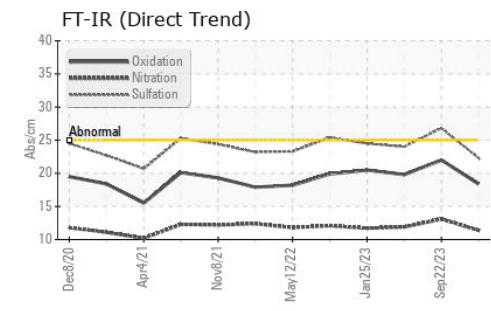
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	7	6
Potassium	ppm	ASTM D5185m	>20	6	5	3
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	0.6	1	0.7
Nitration	Abs/cm	*ASTM D7624	>20	11.4	13.1	11.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	26.8	24.0
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	>158	4	2	2
Boron	ppm	ASTM D5185m	250	30	22	32
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	2	2	3
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	450	791	793	776
Calcium	ppm	ASTM D5185m	3000	1450	1402	1497
Phosphorus	ppm	ASTM D5185m	1150	794	755	726
Zinc	ppm	ASTM D5185m	1350	901	874	891
Sulfur	ppm	ASTM D5185m	4250	3647	2979	4001
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.4	22.0	19.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.21	6.51	8.51
Visc @ 100°C	cSt	ASTM D445	14.4	14.5	14.4	13.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0844183
Lab Number : 06211942
Unique Number : 11084806
Test Package : MOB 2 (Additional Tests: TAN Man)

Received : 17 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 19 Jun 2024 - Don Baldrige

LYNDEN TRANSPORT - FIFE
 5410 12TH STREET EAST
 FIFE, WA
 US 98424
 Contact: CHESTER ANGLEMYER
 chestera@ltia.lynden.com
 T: (253)926-7245
 F: (253)926-7249

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)