



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH 109
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (11 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0844107	WC0778895	WC0778885
Sample Date		Client Info		16 May 2024	11 Sep 2023	11 May 2023
Machine Age	hrs	Client Info		10380	9791	9251
Oil Age	hrs	Client Info		450	450	450
Filter Age	hrs	Client Info		450	450	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	>90	72	8	90
Chromium	ppm	ASTM D5185m	>20	3	<1	5
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	11	3	29
Lead	ppm	ASTM D5185m	>40	2	<1	2
Copper	ppm	ASTM D5185m	>330	2	<1	2
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

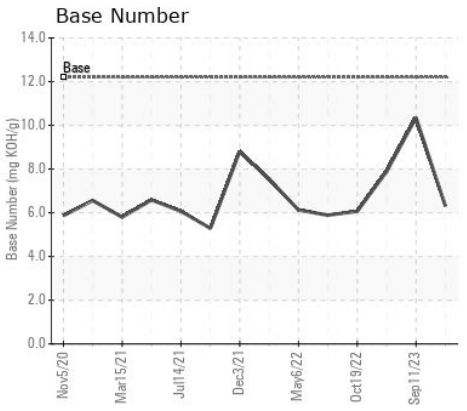
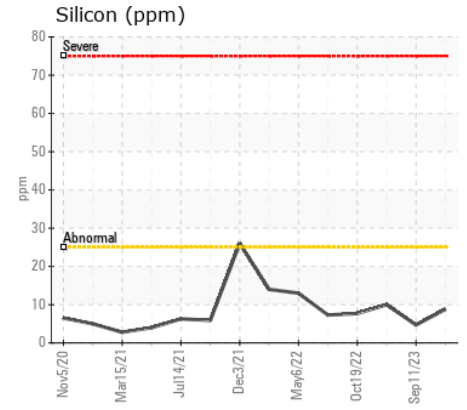
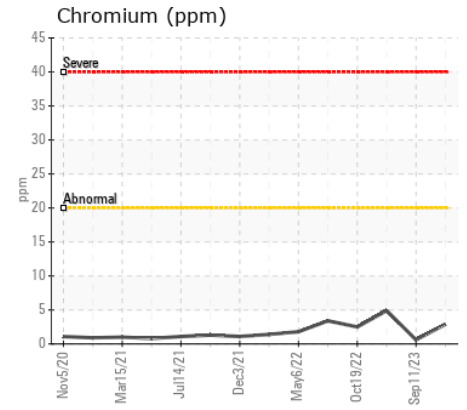
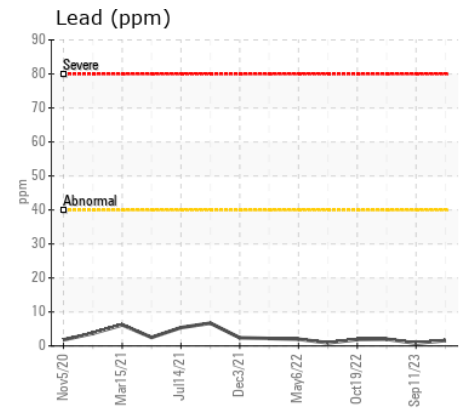
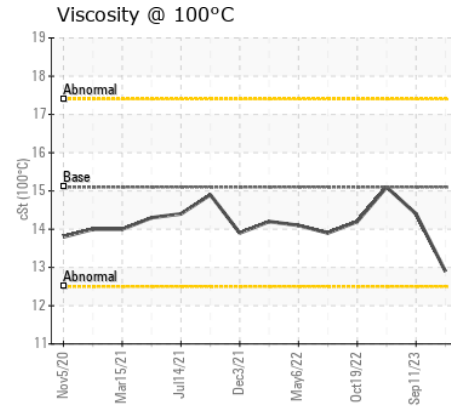
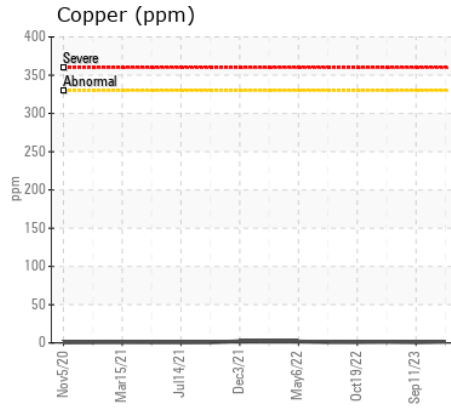
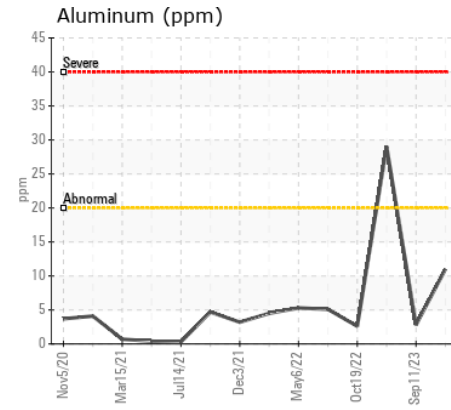
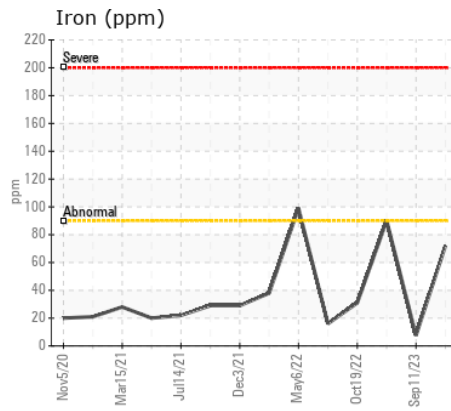
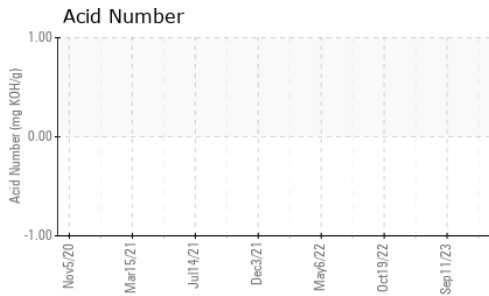
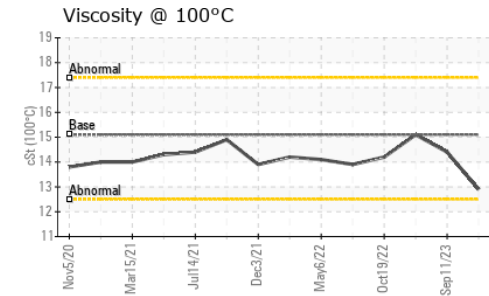
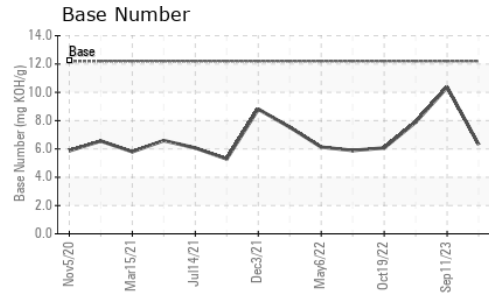
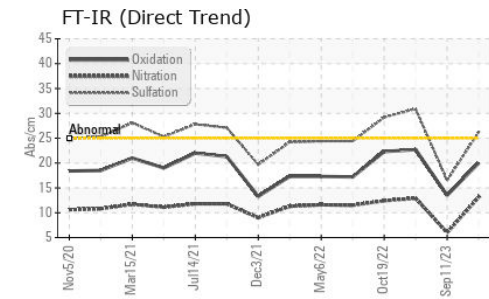
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	9	5	10
Potassium	ppm	ASTM D5185m	>20	16	7	62
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	1.5	0.3	2.3
Nitration	Abs/cm	*ASTM D7624	>20	13.1	6.0	12.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.2	16.5	30.9
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		6	3	4
Boron	ppm	ASTM D5185m		19	58	50
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		51	49	10
Manganese	ppm	ASTM D5185m		1	<1	1
Magnesium	ppm	ASTM D5185m		1064	993	828
Calcium	ppm	ASTM D5185m		1038	827	1647
Phosphorus	ppm	ASTM D5185m	1360	1019	865	811
Zinc	ppm	ASTM D5185m	1480	1250	1114	986
Sulfur	ppm	ASTM D5185m		3547	3530	3674
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.0	13.5	22.7
Base Number (BN)	mg KOH/g	ASTM D2896	12.2	6.31	10.35	7.89
Visc @ 100°C	cSt	ASTM D445	15.1	12.9	14.4	15.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0844107 **Received** : 17 Jun 2024
Lab Number : 06211958 **Tested** : 19 Jun 2024
Unique Number : 11084822 **Diagnosed** : 19 Jun 2024 - Don Baldrige
Test Package : MOB 2 (Additional Tests: TAN Man)

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)