



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH 817
Component
Diesel Engine
Fluid
CHEVRON DELO 400 XLE 10W30 (26 QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0778996	WCM2318377	WCM2316840
Sample Date		Client Info		26 Jan 2024	25 Feb 2021	16 Oct 2020
Machine Age	hrs	Client Info		750	450	5539
Oil Age	hrs	Client Info		750	450	450
Filter Age	hrs	Client Info		750	450	450
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	SEVERE	SEVERE

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>90	36	7	18
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>2	0	2	0
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	16	<1	2
Lead	ppm	ASTM D5185m	>40	0	1	6
Copper	ppm	ASTM D5185m	>330	13	<1	1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

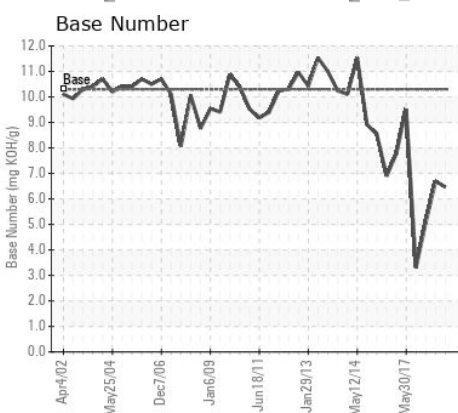
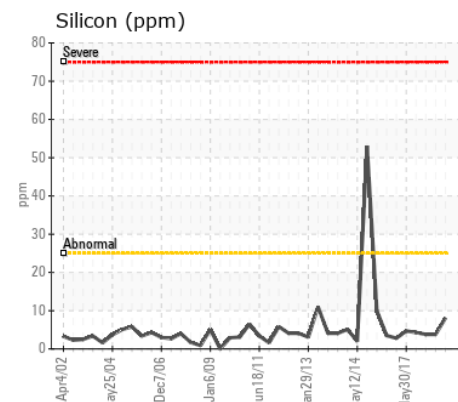
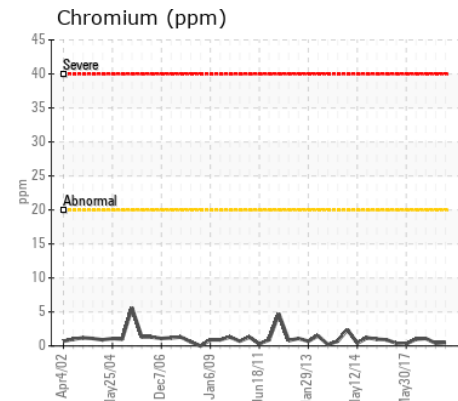
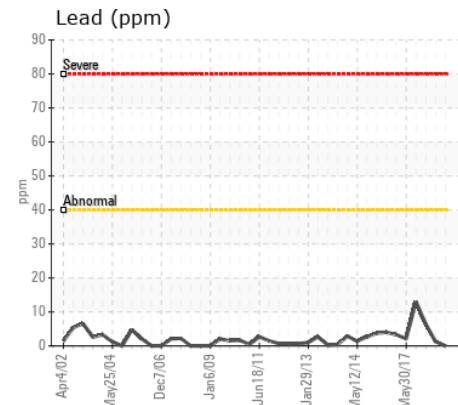
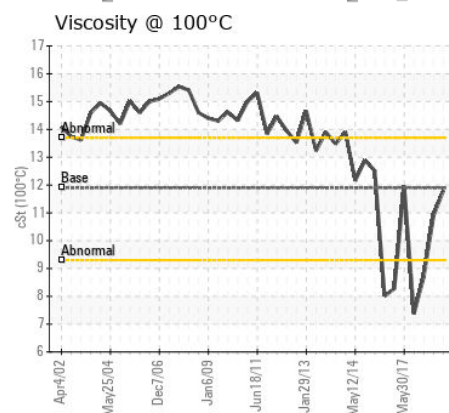
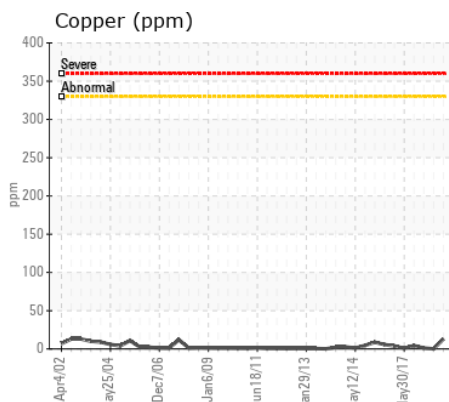
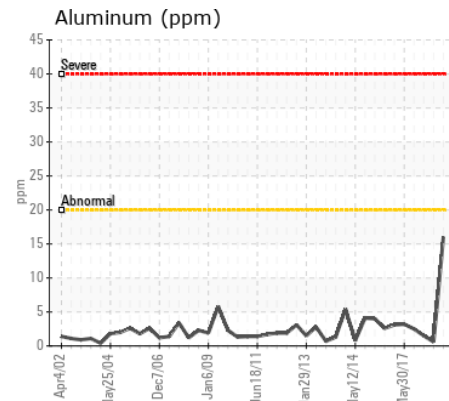
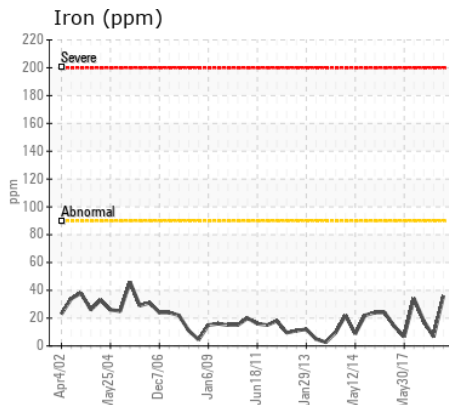
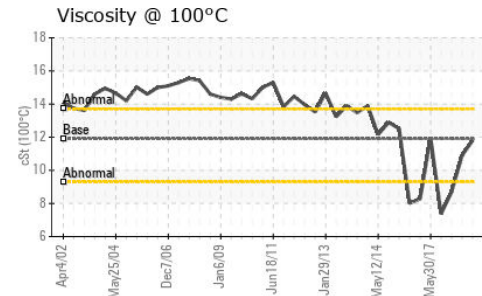
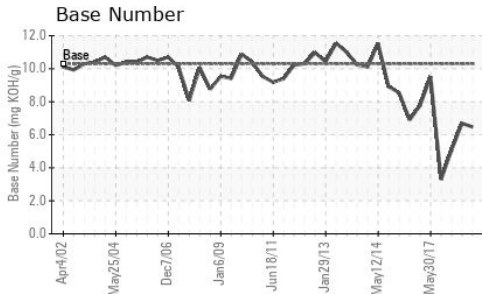
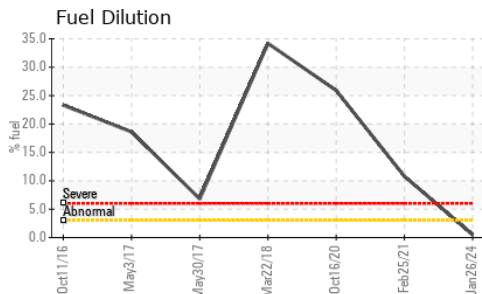
Fuel content negligible. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	4	4
Potassium	ppm	ASTM D5185m	>20	55	5	<1
Fuel	%	ASTM D3524	>3.0	0.5	10.8	25.9
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.4	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	10.8	7.9	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	19.1	19.8
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	3	2
Boron	ppm	ASTM D5185m		32	75	45
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	3	7
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		732	677	568
Calcium	ppm	ASTM D5185m	2900	1325	1280	1115
Phosphorus	ppm	ASTM D5185m	1100	696	612	552
Zinc	ppm	ASTM D5185m	1200	832	669	624
Sulfur	ppm	ASTM D5185m	4000	2905	2167	2249
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.2	13.2	14.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	6.47	6.69	5.08
Visc @ 100°C	cSt	ASTM D445	11.9	11.8	10.9	8.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0778996 **Received** : 22 Feb 2024
Lab Number : 06097231 **Tested** : 25 Feb 2024
Unique Number : 10890084 **Diagnosed** : 25 Feb 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: PercentFuel)

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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