



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**KENWORTH 816**  
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		<b>WC0778994</b>	WCM2252375	WCM2220847
Sample Date		Client Info		<b>25 Jan 2024</b>	02 Dec 2014	04 Jun 2014
Machine Age	mls	Client Info		<b>13591</b>	931	665
Oil Age	mls	Client Info		<b>0</b>	266	259
Filter Age	mls	Client Info		<b>0</b>	266	259
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	SEVERE	ABNORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>90	<b>39</b>	11	10
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	2	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>17</b>	3	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>26</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>2</b>	0	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

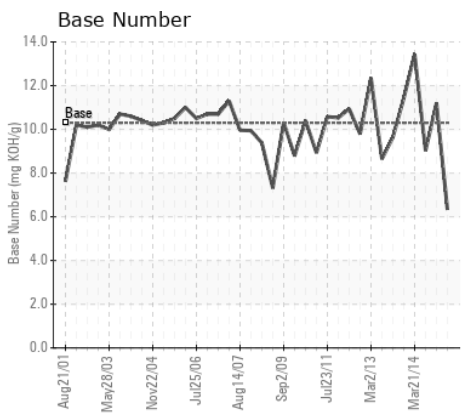
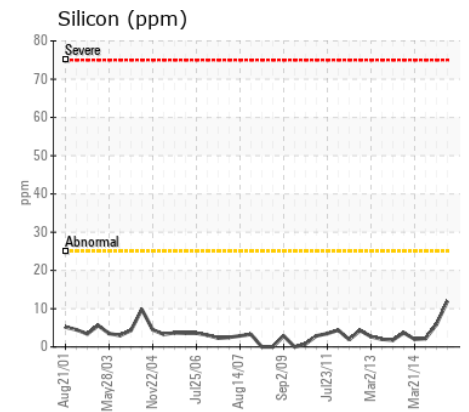
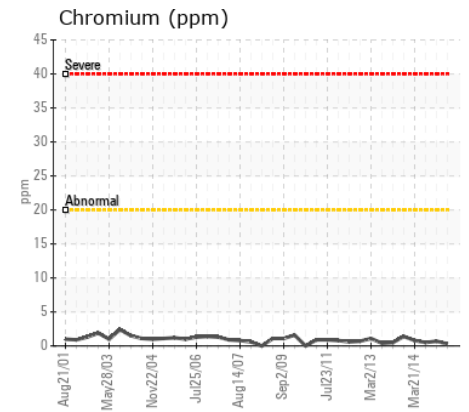
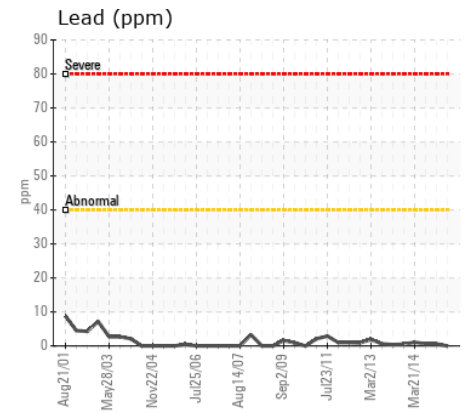
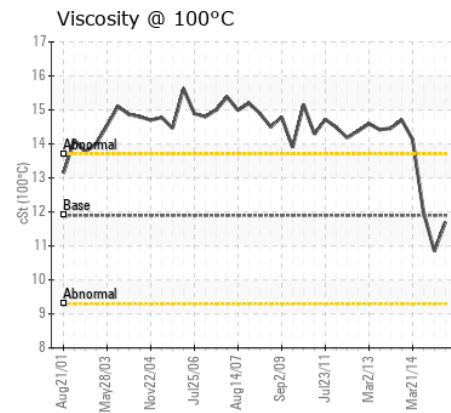
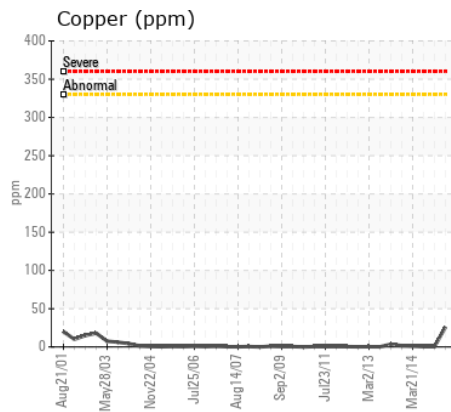
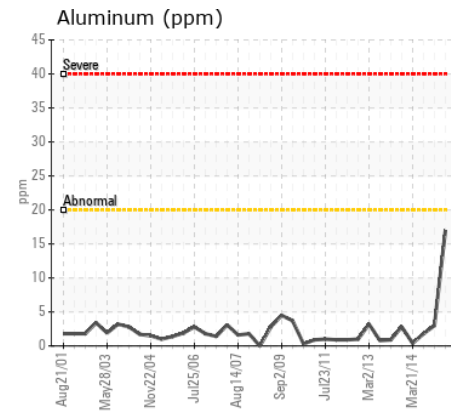
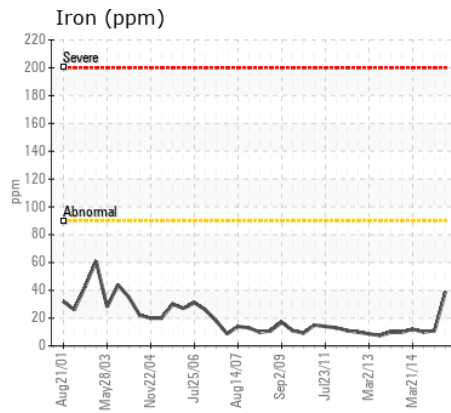
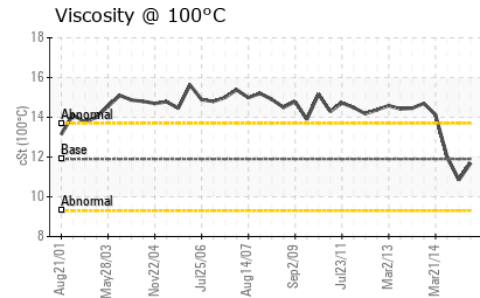
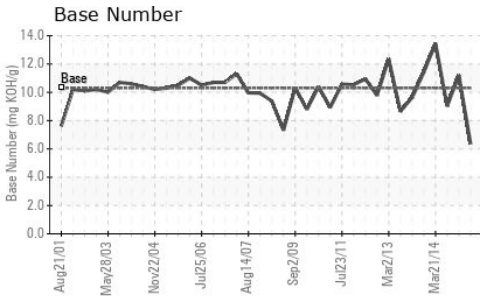
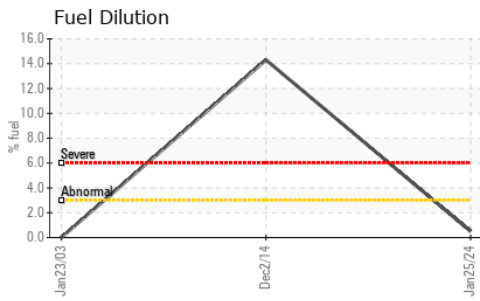
Fuel content negligible. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>12</b>	6	2
Potassium	ppm	ASTM D5185m	>20	<b>44</b>	6	4
Fuel	%	ASTM D3524	>3.0	<b>0.5</b>	14.3	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>0.5</b>	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.6</b>	3.	6.
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.0</b>	12.	17.
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>2</b>	4	4
Boron	ppm	ASTM D5185m		<b>31</b>	355	187
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	74	40
Manganese	ppm	ASTM D5185m		<b>2</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>732</b>	310	146
Calcium	ppm	ASTM D5185m	2900	<b>1299</b>	1586	1789
Phosphorus	ppm	ASTM D5185m	1100	<b>689</b>	977	950
Zinc	ppm	ASTM D5185m	1200	<b>827</b>	1135	1115
Sulfur	ppm	ASTM D5185m	4000	<b>2803</b>	2974	887
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.7</b>	5.	13.
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	<b>6.34</b>	11.20	9.03
Visc @ 100°C	cSt	ASTM D445	11.9	<b>11.7</b>	10.85	11.99



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0778994

Lab Number : 06097230

Unique Number : 10890083

Test Package : MOB 2 ( Additional Tests: PercentFuel )

Received : 22 Feb 2024

Tested : 25 Feb 2024

Diagnosed : 25 Feb 2024 - Wes Davis

LYNDEN TRANSPORT - FIFE

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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)