



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**KENWORTH 818**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON DELO 400 XLE 10W30 (34 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0844155</b>	WCM2205604	WCM2205711
Sample Date		Client Info		<b>28 Mar 2024</b>	18 Aug 2012	08 Feb 2012
Machine Age	mls	Client Info		<b>13679</b>	29358	18564
Oil Age	mls	Client Info		<b>809</b>	5242	998
Filter Age	mls	Client Info		<b>809</b>	5242	998
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>90	<b>41</b>	17	6
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>16</b>	1	2
Lead	ppm	ASTM D5185m	>50	<b>0</b>	1	0
Copper	ppm	ASTM D5185m	>55	<b>10</b>	1	<1
Tin	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
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

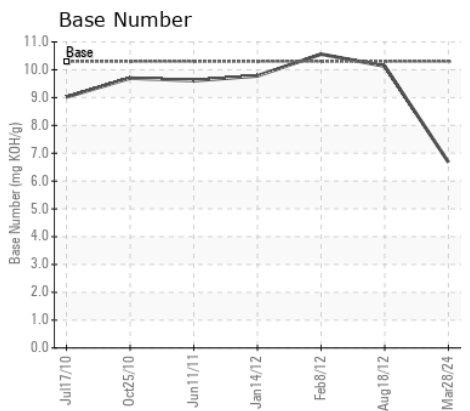
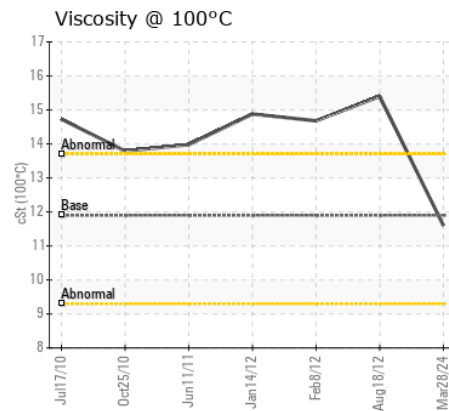
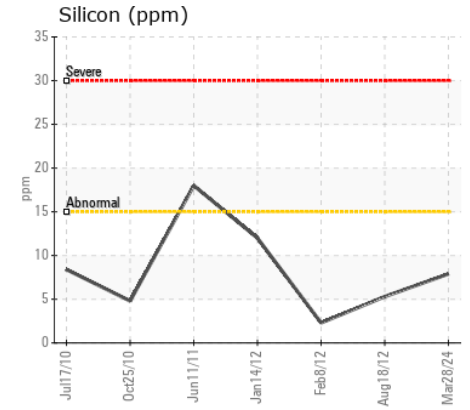
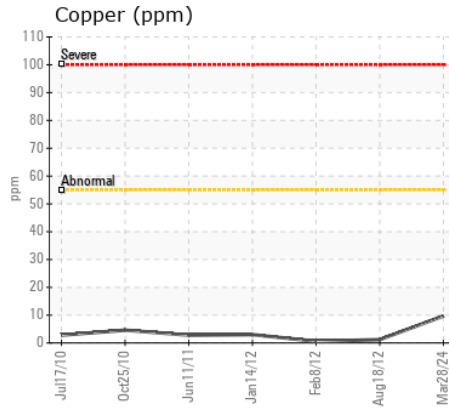
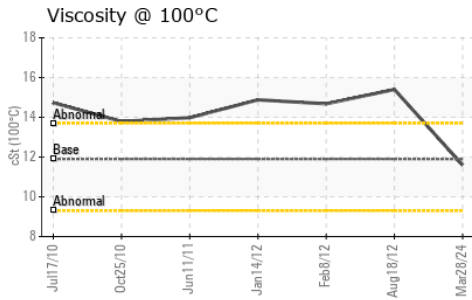
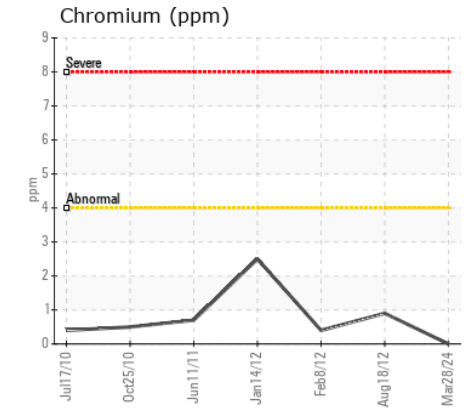
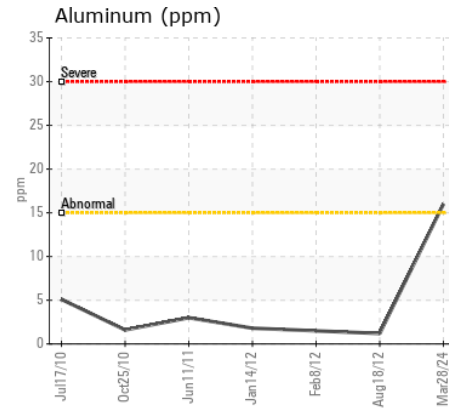
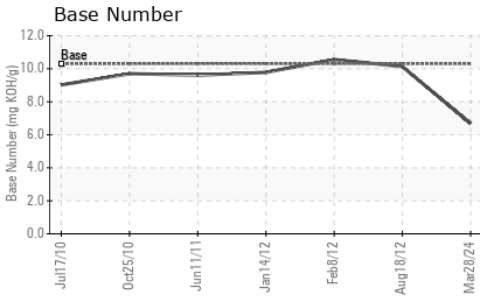
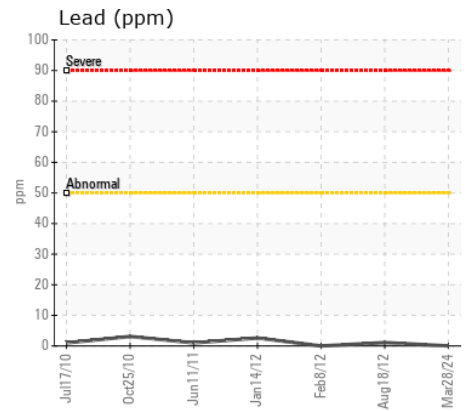
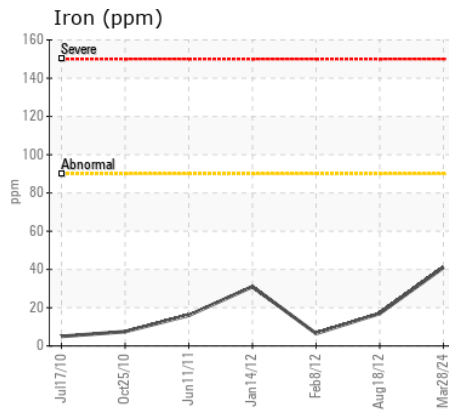
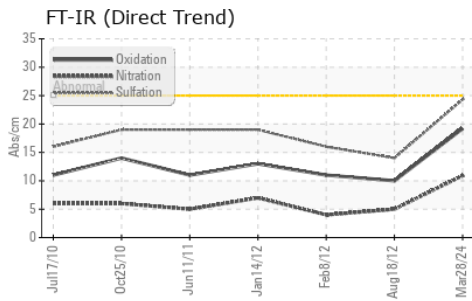
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>8</b>	5	2
Potassium	ppm	ASTM D5185m	>20	<b>42</b>	6	8
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<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>0.6</b>	0.4	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.9</b>	5.	4.
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.3</b>	14.	16.
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>4</b>	4	2
Boron	ppm	ASTM D5185m		<b>26</b>	28	42
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	3	5
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>839</b>	14	16
Calcium	ppm	ASTM D5185m	2900	<b>1544</b>	2250	2402
Phosphorus	ppm	ASTM D5185m	1100	<b>814</b>	1004	850
Zinc	ppm	ASTM D5185m	1200	<b>916</b>	1121	1140
Sulfur	ppm	ASTM D5185m	4000	<b>3780</b>	3145	3132
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.2</b>	10.	11.
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	<b>6.68</b>	10.13	10.56
Visc @ 100°C	cSt	ASTM D445	11.9	<b>11.6</b>	15.4	14.68



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0844155  
**Lab Number** : 06146747  
**Unique Number** : 10976825  
**Test Package** : MOB 2

**Received** : 11 Apr 2024  
**Tested** : 15 Apr 2024  
**Diagnosed** : 15 Apr 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)