



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**VOLVO 128904**  
Component  
**Front Diesel Engine**  
Fluid  
**SAE 15W40 (11 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KLMFA13441</b>	KLMFA06557	KLMF001302
Sample Date		Client Info		<b>05 Oct 2013</b>	17 Jul 2013	19 Nov 2012
Machine Age	mls	Client Info		<b>2549609</b>	2517234	2474694
Oil Age	mls	Client Info		<b>66048</b>	33673	500947
Filter Age	mls	Client Info		<b>66048</b>	33673	500947
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	MARGINAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m		<b>107</b>	69	142
Chromium	ppm	ASTM D5185m		<b>4</b>	3	3
Nickel	ppm	ASTM D5185m		<b>1</b>	<1	2
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m		<b>18</b>	18	8
Lead	ppm	ASTM D5185m		<b>8</b>	6	32
Copper	ppm	ASTM D5185m		<b>24</b>	23	61
Tin	ppm	ASTM D5185m		<b>2</b>	2	1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

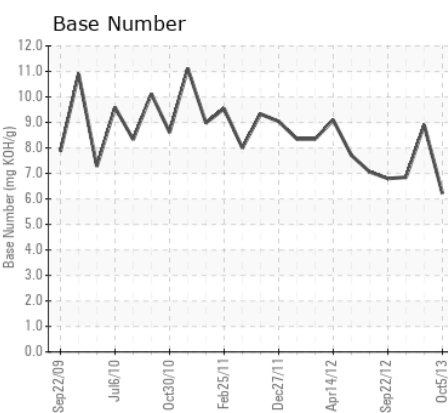
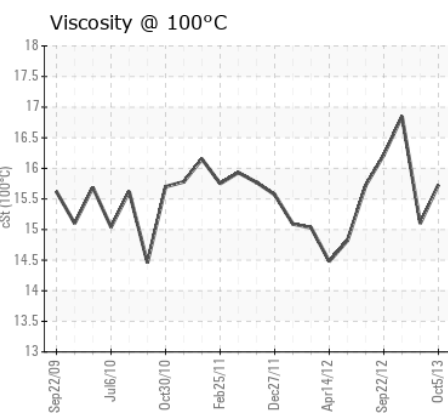
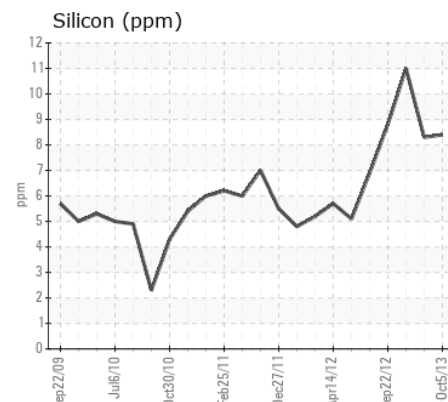
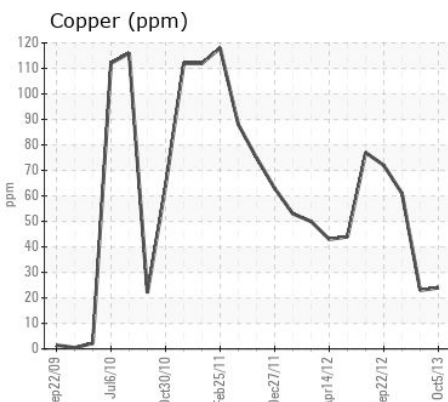
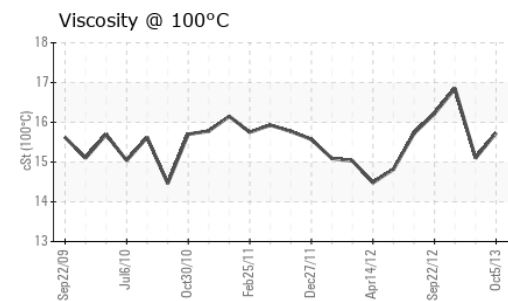
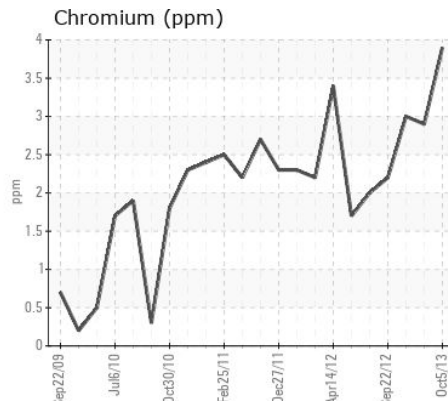
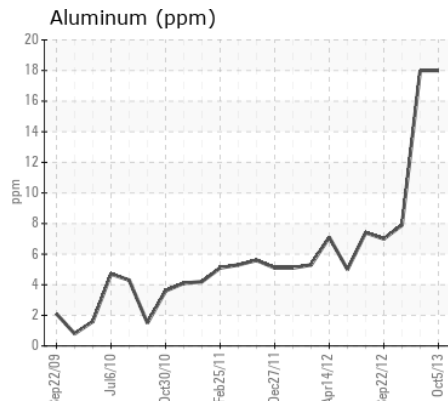
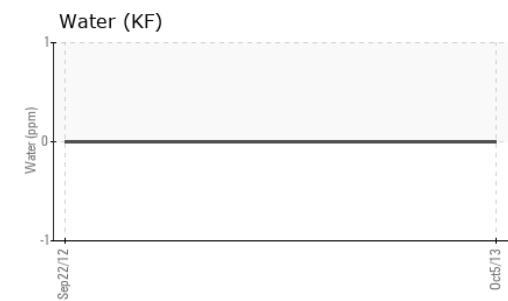
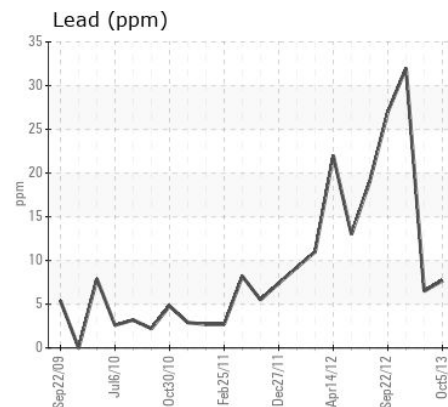
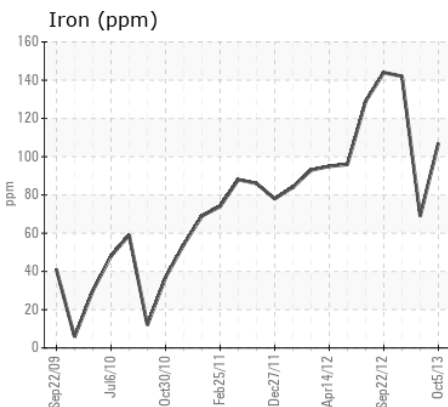
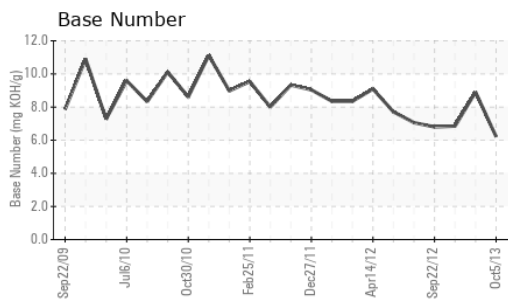
There is no indication of any contamination in the component.

Silicon	ppm	ASTM D5185m		<b>8</b>	8	11
Potassium	ppm	ASTM D5185m		<b>&lt;1</b>	3	12
Fuel		WC Method		<b>&lt;1.0</b>	<1.0	<1.0
Water	%	ASTM D6304		<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>2.5</b>	1	2.6
Nitration	Abs/cm	*ASTM D7624		<b>10.</b>	6.	10.
Sulfation	Abs/.1mm	*ASTM D7415		<b>26.</b>	18.	26.
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		<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The condition of the oil is suitable for further service. The TBN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		<b>6</b>	5	9
Boron	ppm	ASTM D5185m		<b>39</b>	77	58
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>96</b>	84	78
Manganese	ppm	ASTM D5185m		<b>2</b>	<1	2
Magnesium	ppm	ASTM D5185m		<b>382</b>	347	324
Calcium	ppm	ASTM D5185m		<b>1709</b>	1553	2304
Phosphorus	ppm	ASTM D5185m		<b>1038</b>	1008	1144
Zinc	ppm	ASTM D5185m		<b>1362</b>	1270	1444
Sulfur	ppm	ASTM D5185m		<b>1569</b>	2758	3103
Oxidation	Abs/.1mm	*ASTM D7414		<b>19.</b>	11.	21.
Base Number (BN)	mg KOH/g	ASTM D2896		<b>6.22</b>	8.9	6.85
Visc @ 100°C	cSt	ASTM D445		<b>15.73</b>	15.1	▲ 16.85



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KLMFA13441 **Received** : 16 Oct 2013  
**Lab Number** : 03377929 **Diagnosed** : 16 Oct 2013  
**Unique Number** : 6415696 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 2 ( Additional Tests: KF, PQ )

**EDAN FARMS INC.**  
 13549 WOODWORTH RD.  
 NEW SPRINGFIELD, OH  
 US 44443  
 Contact: ERIC SCHAEFER  
 leslie.edan@zoominternet.net  
 T: (330)549-5567  
 F: (330)549-0255

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)