



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

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

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KLMFA13438	KLMFA13367	KLMFA13441
Sample Date		Client Info		28 Dec 2013	16 Nov 2013	05 Oct 2013
Machine Age	mls	Client Info		2613783	2583456	2549609
Oil Age	mls	Client Info		130222	99895	66048
Filter Age	mls	Client Info		130222	99895	66048
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	163	137	107
Chromium	ppm	ASTM D5185m	>20	4	4	4
Nickel	ppm	ASTM D5185m	>2	2	2	1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	16	16	18
Lead	ppm	ASTM D5185m	>40	6	7	8
Copper	ppm	ASTM D5185m	>330	29	27	24
Tin	ppm	ASTM D5185m	>15	<1	2	2
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

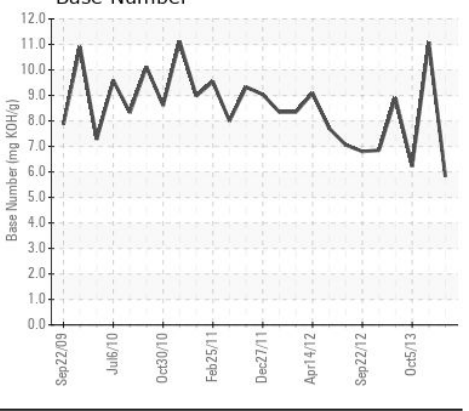
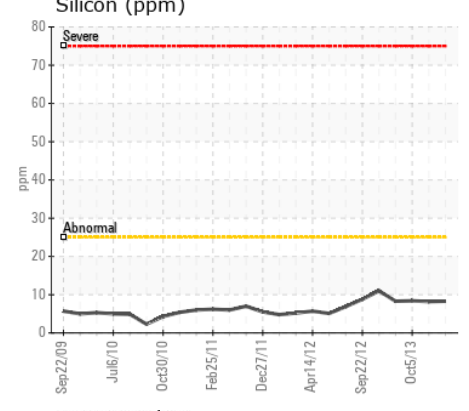
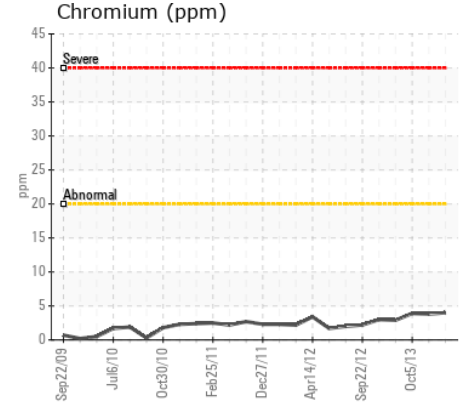
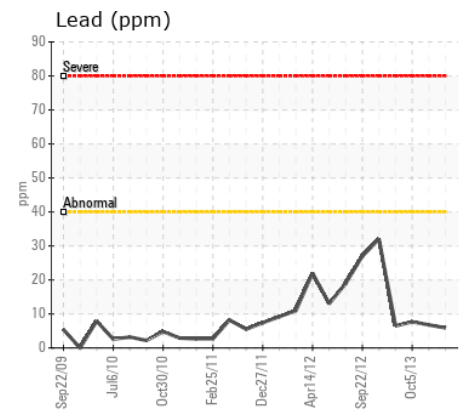
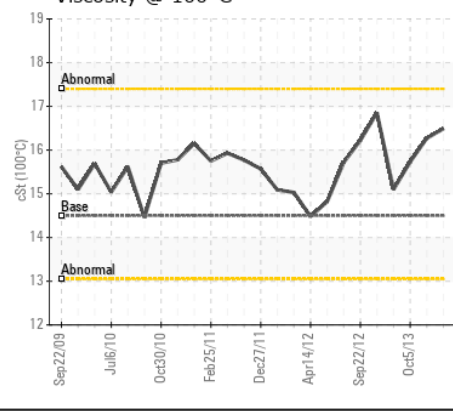
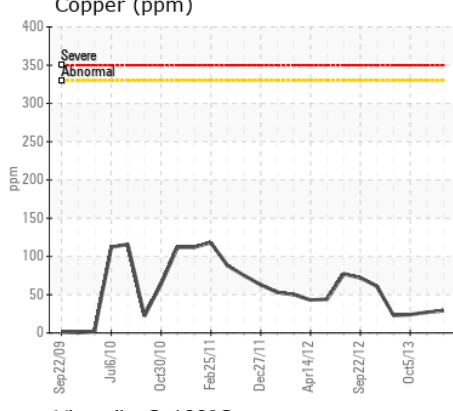
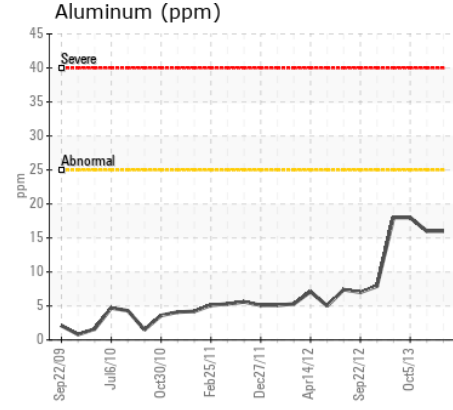
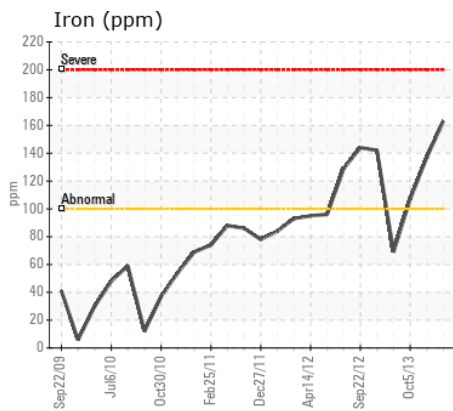
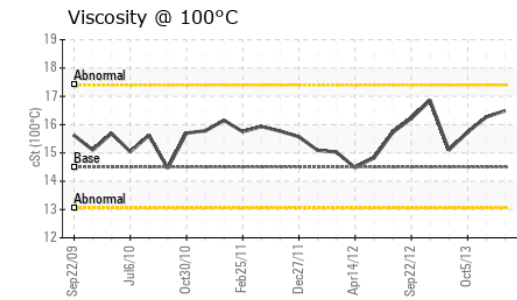
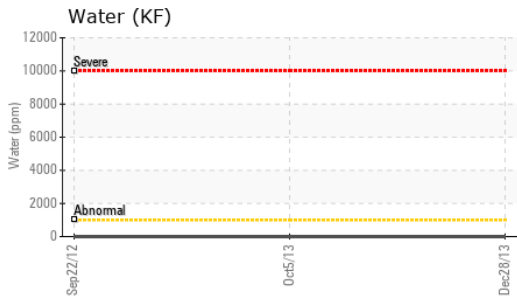
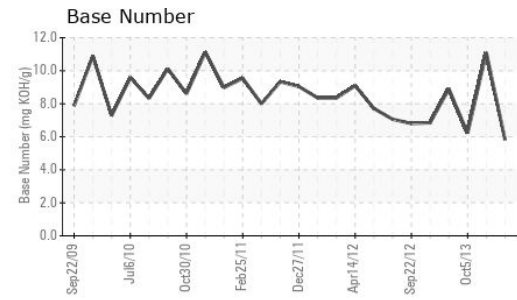
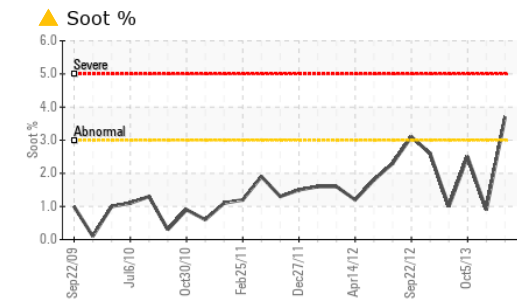
There is an abnormal amount of solids and carbon present in the oil.

Silicon	ppm	ASTM D5185m	>25	8	8	8
Potassium	ppm	ASTM D5185m	>20	<1	0	<1
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water	%	ASTM D6304	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	3.7	0.9	2.5
Nitration	Abs/cm	*ASTM D7624		11.	5.	10.
Sulfation	Abs/.1mm	*ASTM D7415		29.	15.	26.
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	>0.1	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		7	8	6
Boron	ppm	ASTM D5185m		67	50	39
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		92	91	96
Manganese	ppm	ASTM D5185m		2	2	2
Magnesium	ppm	ASTM D5185m		367	366	382
Calcium	ppm	ASTM D5185m		1651	1684	1709
Phosphorus	ppm	ASTM D5185m		1086	1014	1038
Zinc	ppm	ASTM D5185m		1293	1283	1362
Sulfur	ppm	ASTM D5185m		1072	1232	1569
Oxidation	Abs/.1mm	*ASTM D7414		23.	9.	19.
Base Number (BN)	mg KOH/g	ASTM D2896		5.82	11.09	6.22
Visc @ 100°C	cSt	ASTM D445	14.5	16.49	16.27	15.73



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KLMFA13438 **Received** : 13 Jan 2014
Lab Number : 03428898 **Diagnosed** : 15 Jan 2014
Unique Number : 6496699 **Diagnostician** : Jonathan Hester
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)