



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	MARGINAL

Machine Id
FREIGHTLINER 118582

Component
Front Diesel Engine

Fluid
SAE 15W40 (11 GAL)

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		KLMFA13453	KLMFA07594	KLMFA07628
Sample Date		Client Info		21 Oct 2013	26 Aug 2013	15 Jul 2013
Machine Age	mls	Client Info		1779560	1751927	1722367
Oil Age	mls	Client Info		85731	58098	28538
Filter Age	mls	Client Info		85731	58098	28538
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				MARGINAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>85	73	57	43
Chromium	ppm	ASTM D5185m	>5	2	2	2
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>40	5	6	5
Lead	ppm	ASTM D5185m	>10	9	10	12
Copper	ppm	ASTM D5185m	>100	13	13	13
Tin	ppm	ASTM D5185m	>4	1	0	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

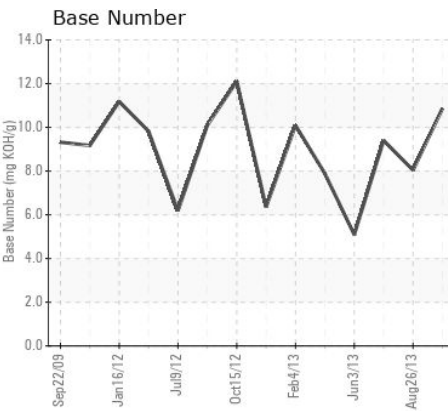
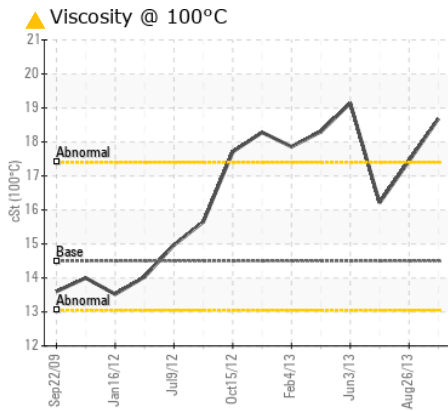
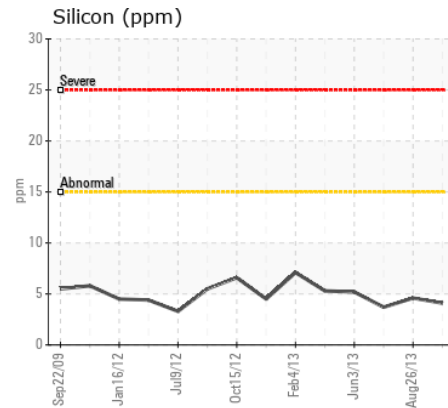
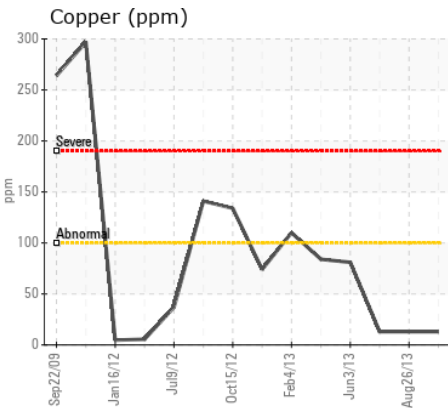
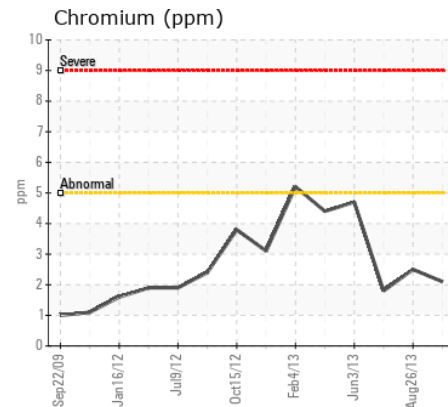
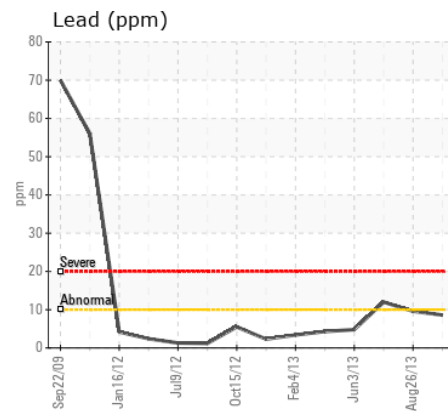
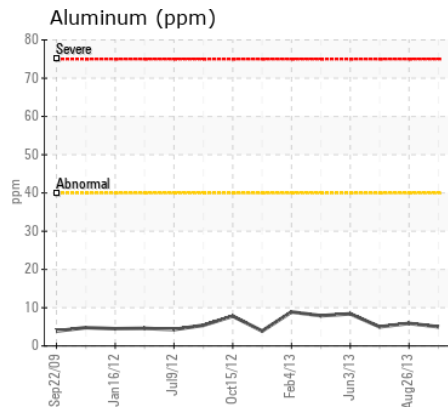
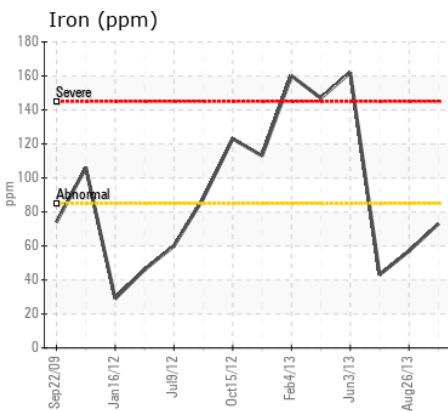
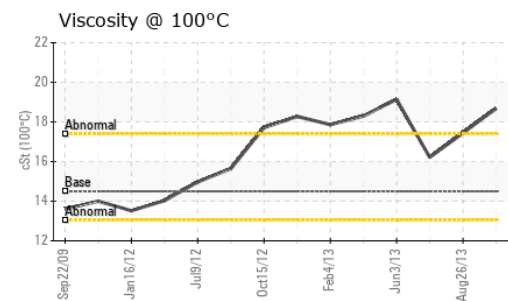
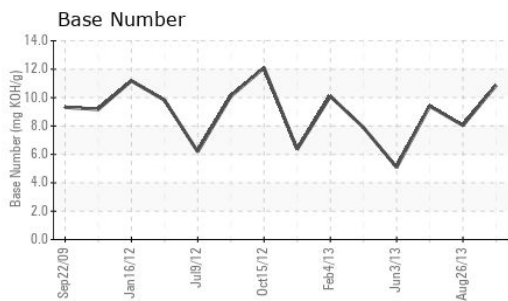
There is no indication of any contamination in the component.

Silicon	ppm	ASTM D5185m	>15	4	5	4
Potassium	ppm	ASTM D5185m	>20	3	0	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.9	▲ 3.5	1.9
Nitration	Abs/cm	*ASTM D7624		3.	9.	6.
Sulfation	Abs/.1mm	*ASTM D7415		12.	24.	19.
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 oil viscosity is higher than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		4	3	2
Boron	ppm	ASTM D5185m		44	83	180
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		67	67	66
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		297	299	289
Calcium	ppm	ASTM D5185m		1540	1563	1654
Phosphorus	ppm	ASTM D5185m		935	920	966
Zinc	ppm	ASTM D5185m		1093	1156	1208
Sulfur	ppm	ASTM D5185m		1470	3551	3742
Oxidation	Abs/.1mm	*ASTM D7414		5.	13.	10.
Base Number (BN)	mg KOH/g	ASTM D2896		10.86	8.04	9.4
Visc @ 100°C	cSt	ASTM D445	14.5	▲ 18.68	▲ 17.44	16.21



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KLMFA13453 **Received** : 29 Oct 2013
Lab Number : 03386270 **Diagnosed** : 30 Oct 2013
Unique Number : 6429042 **Diagnostician** : Don Baldrige
Test Package : MOB 2

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)

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