



VOLVO

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Machine Id
VOLVO EC460CL 110437

Component
Right Planetary

Fluid
VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP181450	---	---
Sample Date		Client Info		15 Dec 2015	---	---
Machine Age	hrs	Client Info		4194	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

WEAR

Bearing and/or gear wear is indicated.

Iron	ppm	ASTM D5185m	>500	4953	---	---
Chromium	ppm	ASTM D5185m	>10	64	---	---
Nickel	ppm	ASTM D5185m		20	---	---
Titanium	ppm	ASTM D5185m		37	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	580	---	---
Lead	ppm	ASTM D5185m	>25	4	---	---
Copper	ppm	ASTM D5185m	>75	484	---	---
Tin	ppm	ASTM D5185m	>10	79	---	---
Vanadium	ppm	ASTM D5185m		1	---	---
White Metal	scalar	*Visual	NONE	LIGHT	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

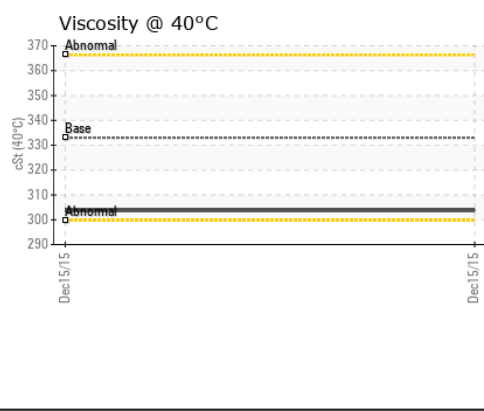
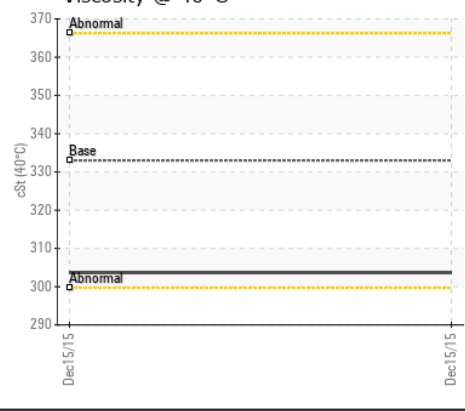
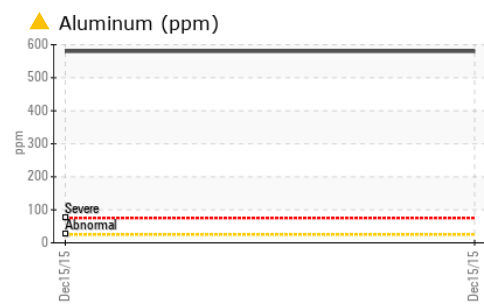
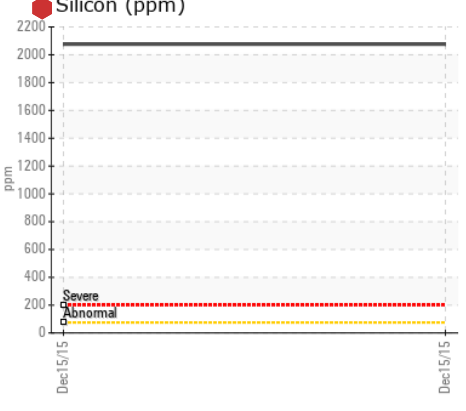
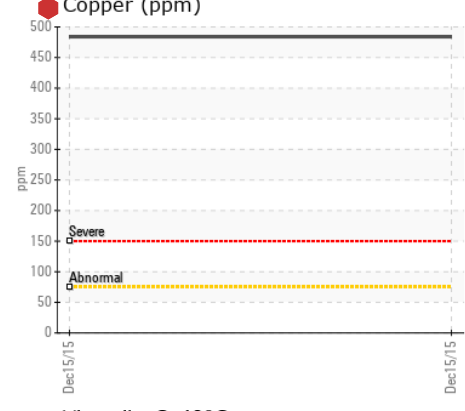
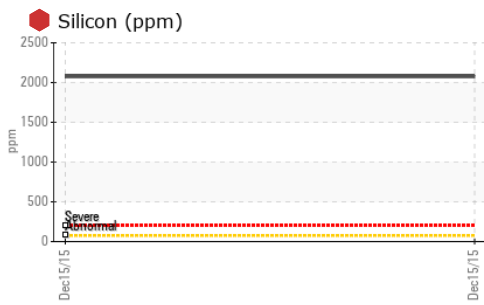
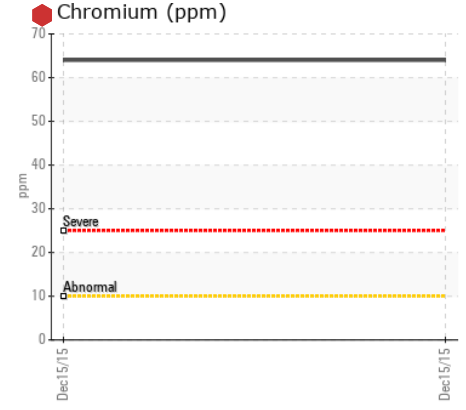
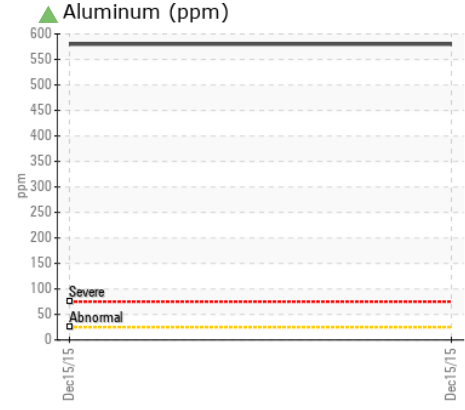
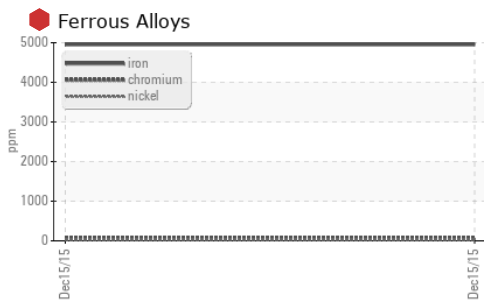
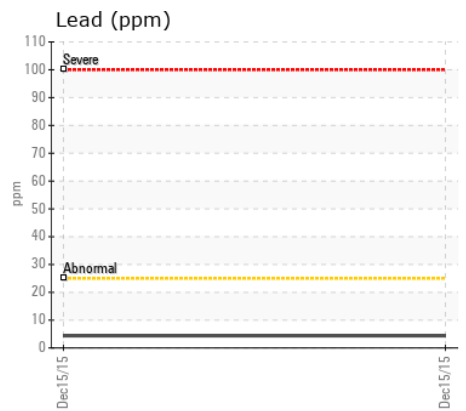
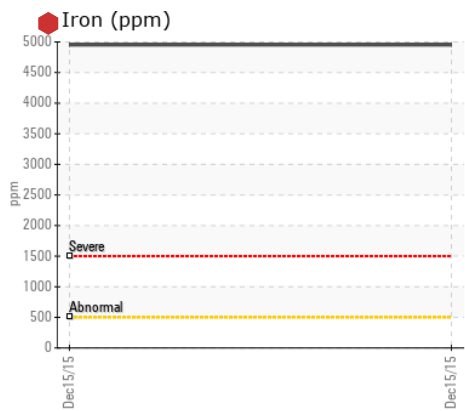
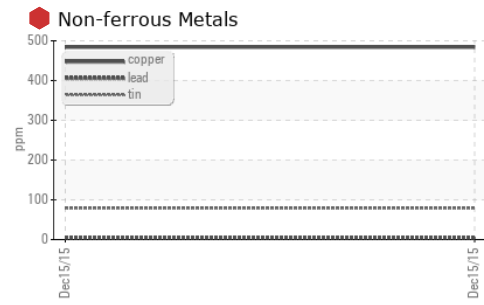
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	2076	---	---
Potassium	ppm	ASTM D5185m	>20	159	---	---
Water		WC Method	>0.2	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		16	---	---
Boron	ppm	ASTM D5185m	111	108	---	---
Barium	ppm	ASTM D5185m	0.0	16	---	---
Molybdenum	ppm	ASTM D5185m	0.9	0	---	---
Manganese	ppm	ASTM D5185m	0.0	43	---	---
Magnesium	ppm	ASTM D5185m	39	40	---	---
Calcium	ppm	ASTM D5185m	93	37	---	---
Phosphorus	ppm	ASTM D5185m	920	874	---	---
Zinc	ppm	ASTM D5185m	104	85	---	---
Sulfur	ppm	ASTM D5185m	20179	23513	---	---
Visc @ 40°C	cSt	ASTM D445	333	303.7	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP181450 **Received** : 18 Dec 2015
Lab Number : 03885945 **Tested** : 21 Dec 2015
Unique Number : 7241235 **Diagnosed** : 21 Dec 2015 - Don Baldrige
Test Package : MOB 1 (Additional Tests: PQ)

MCCLEUNG-LOGAN EQUIPMENT CO - RICHMOND
 1345 MOUNTAIN ROAD
 GLEN ALLEN, VA
 US 23060
 Contact: KYLE RATLIFFE
 KRATLIFFE@MCCLEUNG-LOGAN.COM

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)

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