



PERFORMANCE
UNDER
PRESSURE

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
CATERPILLAR EMD CAT 3412

Component
Diesel Engine

Fluid
{not provided} (20 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RP033553	RP034742	---
Sample Date		Client Info		15 Sep 2006	09 Aug 2006	---
Machine Age	hrs	Client Info		2079	1197	---
Oil Age	hrs	Client Info		1622	740	---
Filter Age	hrs	Client Info		882	740	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m		150	110	---
Chromium	ppm	ASTM D5185m		6	5	---
Nickel	ppm	ASTM D5185m		<1	<1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m		17	12	---
Lead	ppm	ASTM D5185m		3	3	---
Copper	ppm	ASTM D5185m		51	37	---
Tin	ppm	ASTM D5185m		0	2	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

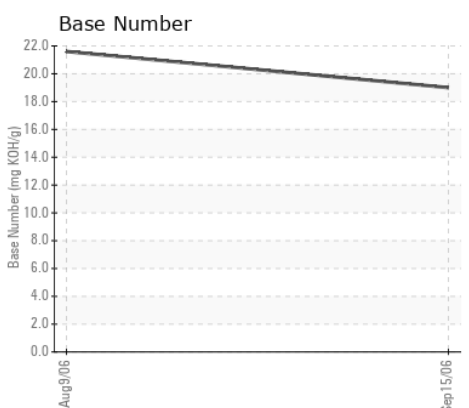
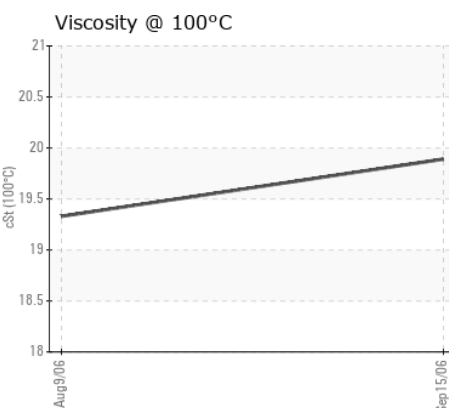
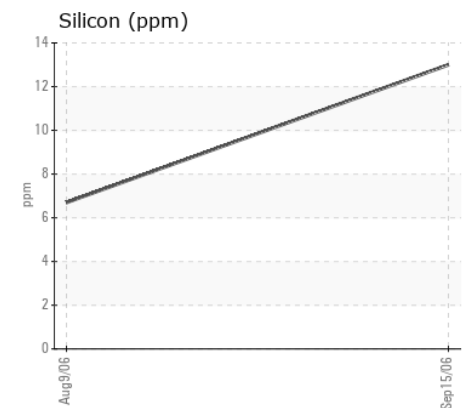
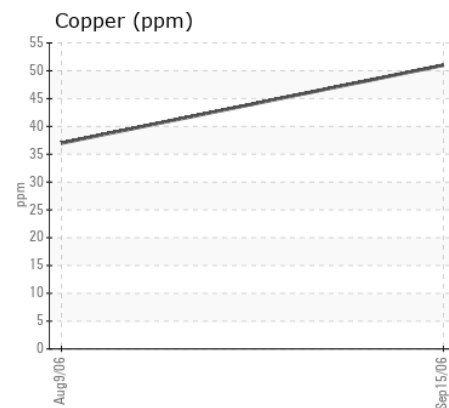
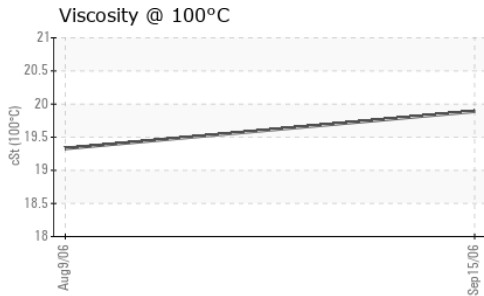
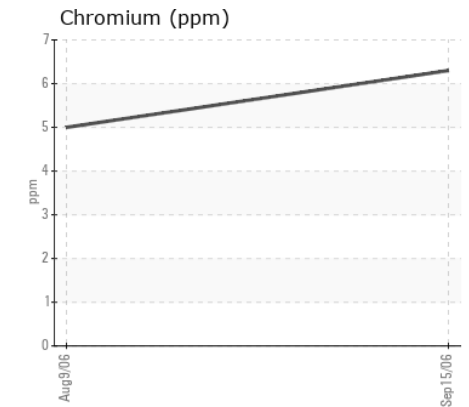
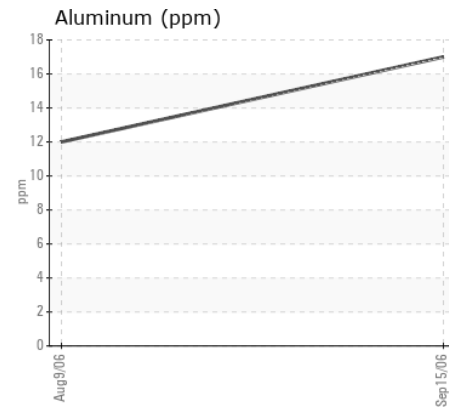
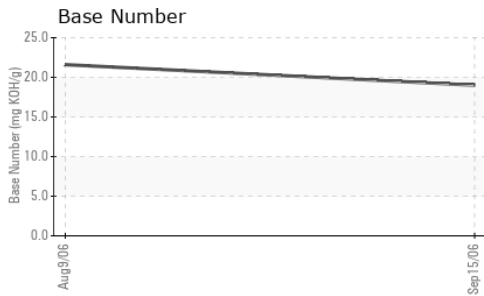
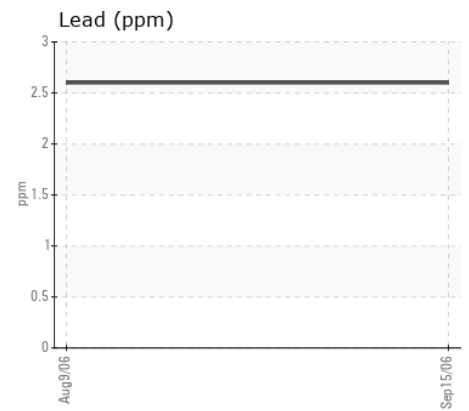
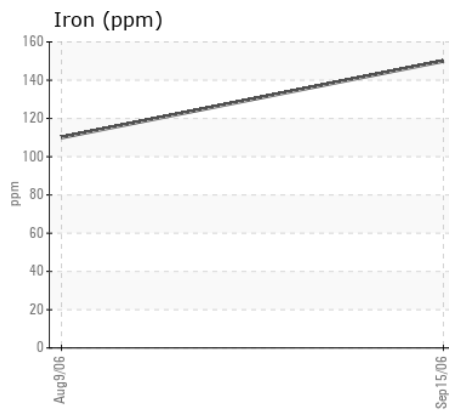
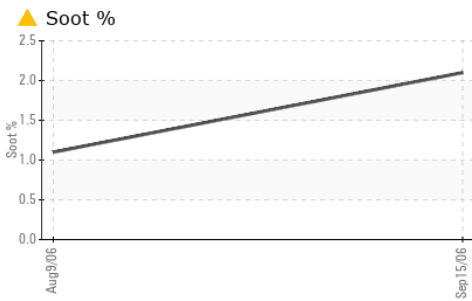
There is no indication of any contamination in the component.

Silicon	ppm	ASTM D5185m		13	7	---
Potassium	ppm	ASTM D5185m		0	<1	---
Fuel		WC Method		<1.0	<1.0	---
Water		WC Method		NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844		▲ 2.1	1.1	---
Nitration	Abs/cm	*ASTM D7624		0.34	0.15	---
Sulfation	Abs/.1mm	*ASTM D7415		0.31	0.58	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual		NEG	0.2%	---

FLUID CONDITION

The condition of oil is suitable for further service.

Sodium	ppm	ASTM D5185m		4	2	---
Boron	ppm	ASTM D5185m		<1	3	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		134	113	---
Manganese	ppm	ASTM D5185m		2	2	---
Magnesium	ppm	ASTM D5185m		3140	2447	---
Calcium	ppm	ASTM D5185m		6430	5626	---
Phosphorus	ppm	ASTM D5185m		886	843	---
Zinc	ppm	ASTM D5185m		1544	1249	---
Oxidation	Abs/.1mm	*ASTM D7414		0.35	0.47	---
Base Number (BN)	mg KOH/g	ASTM D2896		19.0	21.6	---
Visc @ 100°C	cSt	ASTM D445		19.89	19.33	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP033553
Lab Number : 01844444
Unique Number : 3912742
Test Package : MOB 2
Received : 06 Oct 2006
Tested : 09 Oct 2006
Diagnosed : 09 Oct 2006 - Doug Bogart

OILMAX S.A.S.
 AV 6 DICIEMBRE Y GASPAR CANTERO
 QUITO-ECUADOR,

Contact: DANNY BARREIRO
 oilmax.ec@gmail.com
 T: (593)996-451694

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)

F: x: