



**PERFORMANCE  
UNDER  
PRESSURE**

**OIL ANALYSIS REPORT**

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>SEVERE</b>
FLUID CONDITION	<b>ABNORMAL</b>

Machine Id  
**CATERPILLAR EMD CAT 3406B**

Component  
**Diesel Engine**

Fluid  
**{not provided} (10 GAL)**

**RECOMMENDATION**

We advise that you check the fuel injection system. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

**WEAR**

The copper level is abnormal. All other component wear rates are normal.

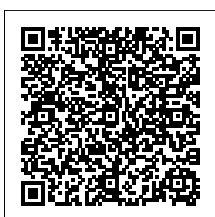
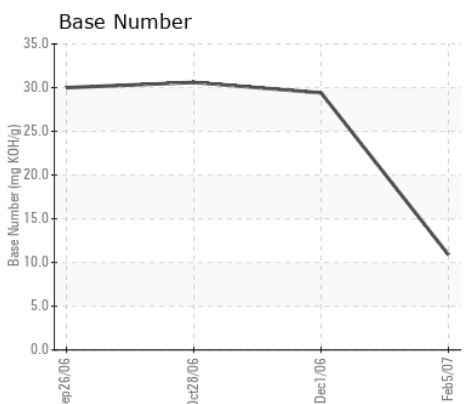
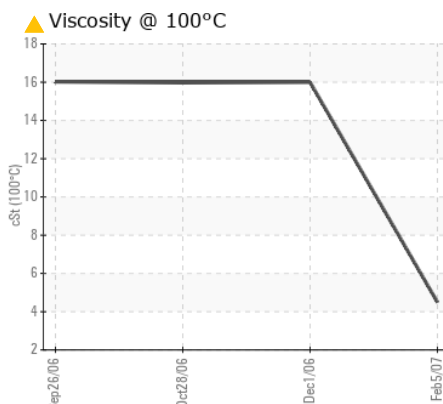
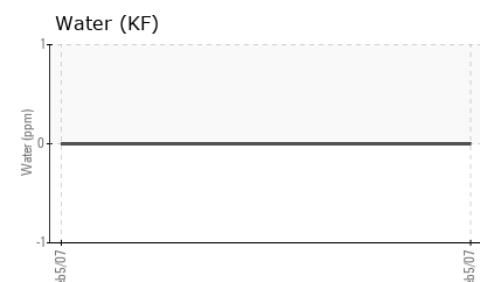
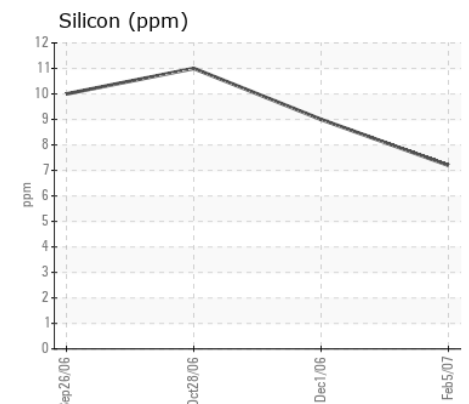
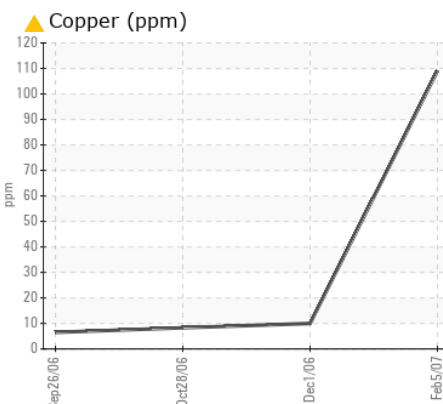
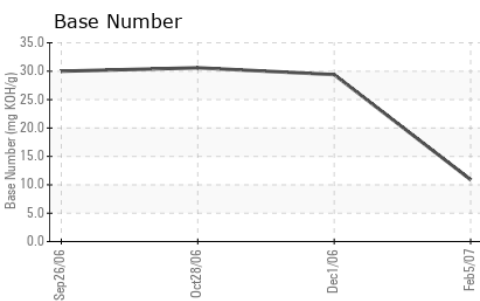
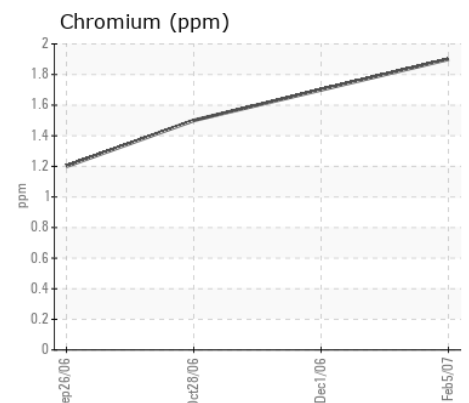
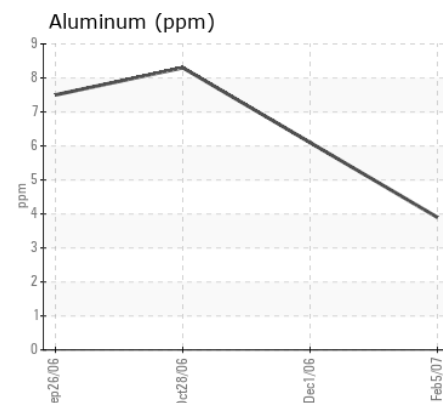
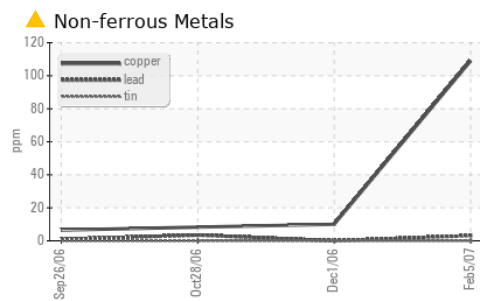
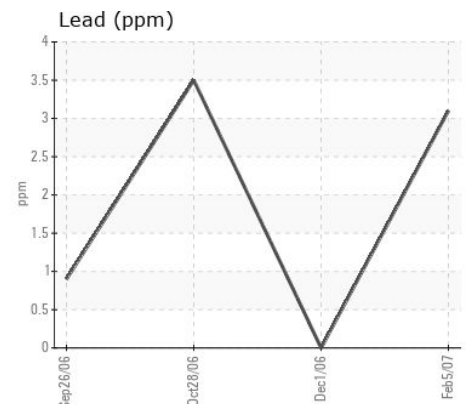
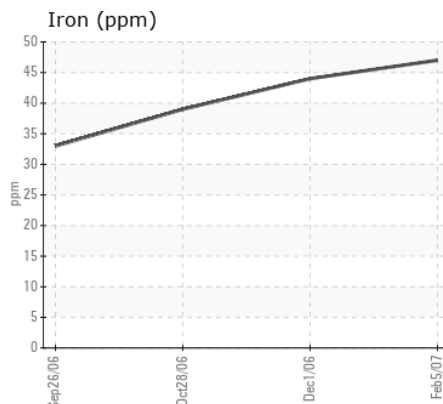
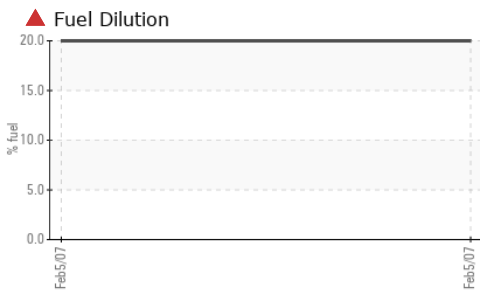
**CONTAMINATION**

There is a high amount of fuel present in the oil. There is a trace of moisture present in the oil.

**FLUID CONDITION**

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>RP034666</b>	RP034556	RP034730
Sample Date		Client Info		<b>05 Feb 2007</b>	01 Dec 2006	28 Oct 2006
Machine Age	hrs	Client Info		<b>14960</b>	13425	12611
Oil Age	hrs	Client Info		<b>1535</b>	2439	1603
Filter Age	hrs	Client Info		<b>770</b>	836	743
Oil Changed		Client Info		<b>Not Chngd</b>	Changed	Not Chngd
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>SEVERE</b>	NORMAL	NORMAL
Iron	ppm	ASTM D5185m		<b>47</b>	44	39
Chromium	ppm	ASTM D5185m		<b>2</b>	2	2
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m		<b>4</b>	6	8
Lead	ppm	ASTM D5185m		<b>3</b>	0	4
Copper	ppm	ASTM D5185m		<b>▲ 109</b>	10	8
Tin	ppm	ASTM D5185m		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185m		<b>7</b>	9	11
Potassium	ppm	ASTM D5185m		<b>&lt;1</b>	1	0
Fuel	%	ASTM D3524		<b>▲ 20.0</b>	<1.0	<1.0
Water	%	ASTM D6304		<b>▲ 0.123</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.2</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624		<b>12.</b>	0.06	0.22
Sulfation	Abs/.1mm	*ASTM D7415		<b>30.</b>	0.00	0.43
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
Sodium	ppm	ASTM D5185m		<b>8</b>	4	5
Boron	ppm	ASTM D5185m		<b>2</b>	1	1
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>56</b>	133	152
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	1
Magnesium	ppm	ASTM D5185m		<b>1501</b>	3568	3541
Calcium	ppm	ASTM D5185m		<b>3048</b>	6729	7104
Phosphorus	ppm	ASTM D5185m		<b>484</b>	1045	1170
Zinc	ppm	ASTM D5185m		<b>736</b>	1506	1648
Oxidation	Abs/.1mm	*ASTM D7414		<b>18.</b>	0.22	0.72
Base Number (BN)	mg KOH/g	ASTM D2896		<b>10.9</b>	29.4	30.6
Visc @ 100°C	cSt	ASTM D445		<b>▲ 4.5</b>	16.00	15.97



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : RP034666

Lab Number : 01925337

Unique Number : 4049017

Test Package : MOB 2 ( Additional Tests: KF, PercentFuel )

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)

Received : 15 Mar 2007

Tested : 20 Mar 2007

Diagnosed : 20 Mar 2007 - Doug Bogart

OILMAX S.A.S.

AV 6 DICIEMBRE Y GASPARGANTERO

QUITO-ECUADOR,

Contact: DANNY BARREIRO

oilmax.ec@gmail.com

T: (593)996-451694

F: x: