



**PERFORMANCE
UNDER
PRESSURE**

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CATERPILLAR EMD 3406B
Component
Diesel Engine
Fluid
ROYAL PURPLE MOTOR OIL 15W40 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RP034809	RP033554	RP034678
Sample Date		Client Info		28 Oct 2006	23 Sep 2006	22 Apr 2006
Machine Age	hrs	Client Info		15453	14639	0
Oil Age	hrs	Client Info		1604	790	1466
Filter Age	hrs	Client Info		814	790	730
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m		74	37	74
Chromium	ppm	ASTM D5185m		2	<1	1
Nickel	ppm	ASTM D5185m		2	<1	1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m		9	7	8
Lead	ppm	ASTM D5185m		4	<1	3
Copper	ppm	ASTM D5185m		8	3	4
Tin	ppm	ASTM D5185m		0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

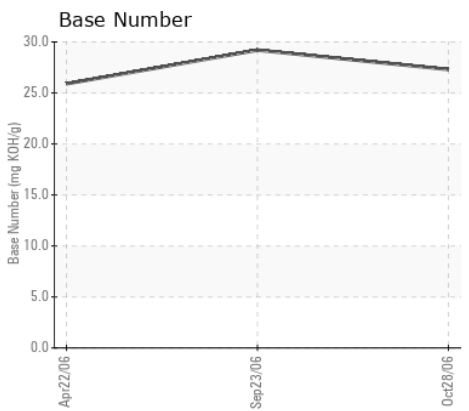
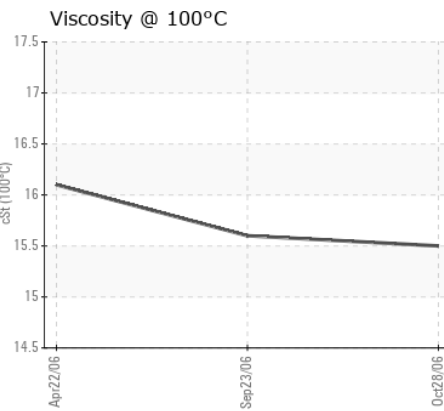
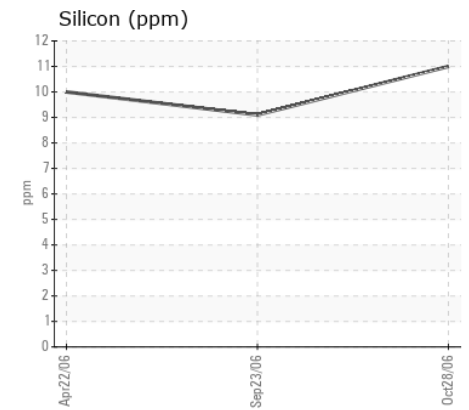
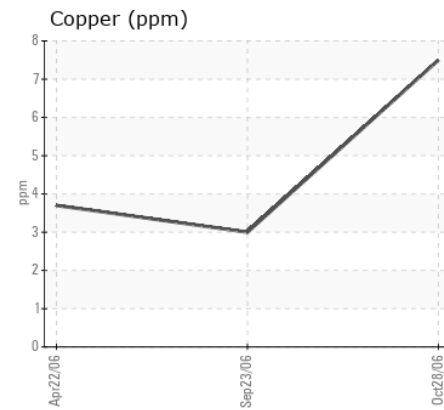
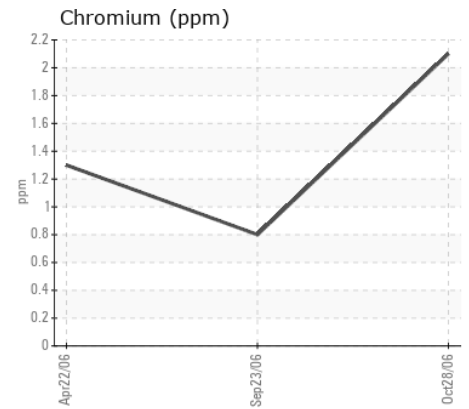
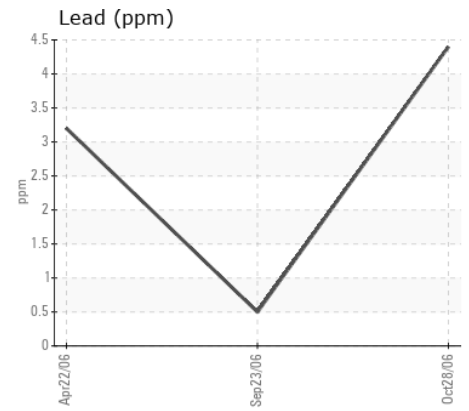
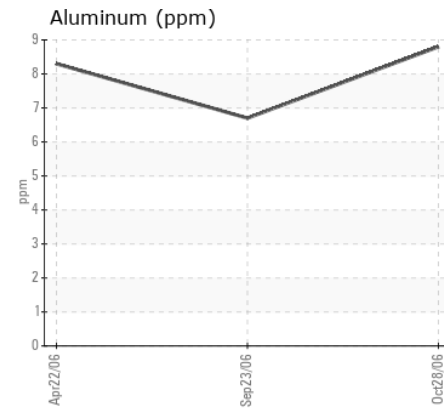
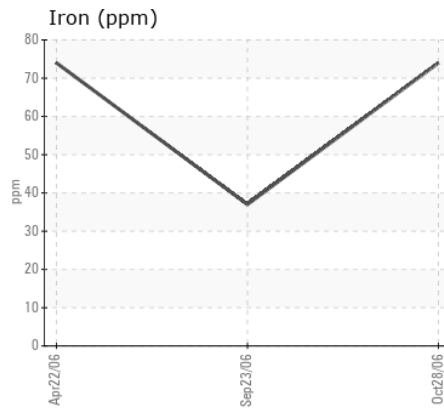
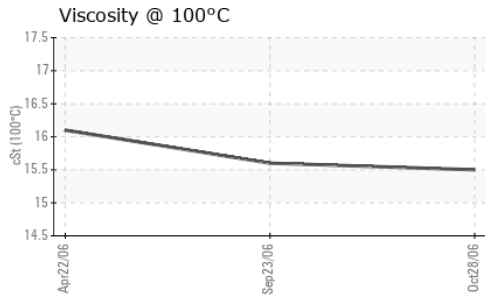
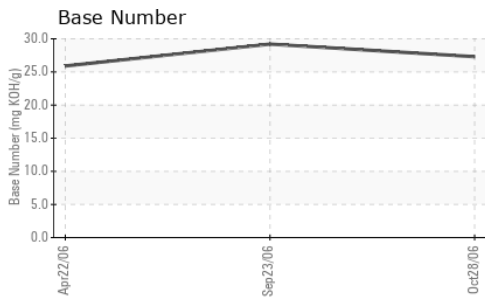
There is no indication of any contamination in the component.

Silicon	ppm	ASTM D5185m		11	9	10
Potassium	ppm	ASTM D5185m		<1	0	0
Fuel		WC Method		<1.0	<1.0	<1.0
Water		WC Method		NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		1.1	0.3	1.1
Nitration	Abs/cm	*ASTM D7624		0.25	0.14	0.23
Sulfation	Abs/.1mm	*ASTM D7415		0.53	0.22	0.53
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		NEG	NEG	0.1%

FLUID CONDITION

The condition of oil is suitable for further service.

Sodium	ppm	ASTM D5185m		5	3	6
Boron	ppm	ASTM D5185m		1	<1	3
Barium	ppm	ASTM D5185m		0	0	19
Molybdenum	ppm	ASTM D5185m		144	113	127
Manganese	ppm	ASTM D5185m		1	1	1
Magnesium	ppm	ASTM D5185m		3462	2688	3323
Calcium	ppm	ASTM D5185m		6897	5459	6152
Phosphorus	ppm	ASTM D5185m		1108	918	1018
Zinc	ppm	ASTM D5185m		1597	1312	1488
Oxidation	Abs/.1mm	*ASTM D7414		0.65	0.26	0.68
Base Number (BN)	mg KOH/g	ASTM D2896		27.3	29.2	25.9
Visc @ 100°C	cSt	ASTM D445		15.5	15.6	16.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP034809
Lab Number : 01866061
Unique Number : 3954611
Test Package : MOB 2

Received : 16 Nov 2006
Tested : 17 Nov 2006
Diagnosed :

OILMAX S.A.S.
 AV 6 DICIEMBRE Y GASPARD 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)

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