MOB II ROYAL PURPLE PERFORMANCE UNDER PRESSURE

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
CATERPILLAR EMD CAT 3412
Component
Diesel Engine
Fluid
SAE 40W (20 GAL)

RECOMMENDATION

We advise that you check for faulty combustion, plugged air filters, or aftercoolers. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

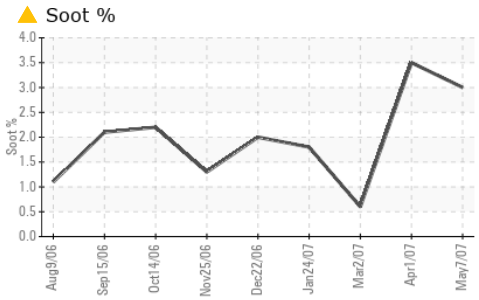
CONTAMINATION

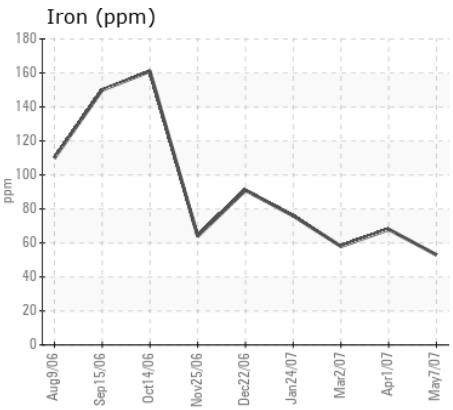
There is an abnormal amount of solids and carbon present in the oil.

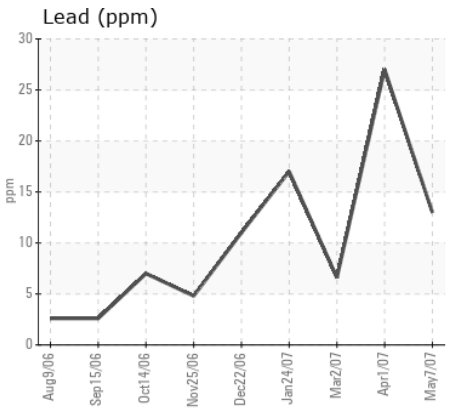
FLUID CONDITION

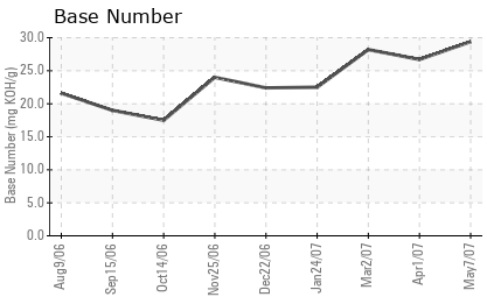
The oil viscosity is higher than normal.

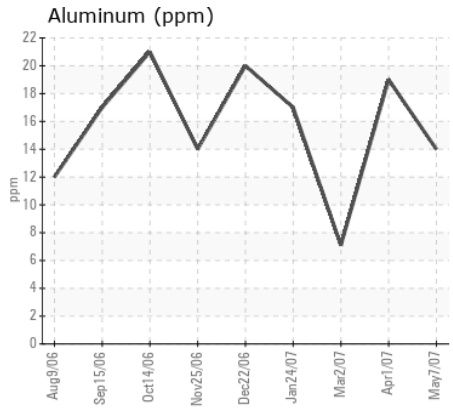
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RP025602	RP034968	RP034655
Sample Date		Client Info		07 May 2007	01 Apr 2007	02 Mar 2007
Machine Age	hrs	Client Info		7428	6583	5887
Oil Age	hrs	Client Info		2439	1594	898
Filter Age	hrs	Client Info		845	696	898
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m		53	68	58
Chromium	ppm	ASTM D5185m		6	8	3
Nickel	ppm	ASTM D5185m		<1	1	2
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m		14	19	7
Lead	ppm	ASTM D5185m		13	27	7
Copper	ppm	ASTM D5185m		49	21	48
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
Silicon	ppm	ASTM D5185m		14	12	9
Potassium	ppm	ASTM D5185m		<1	0	0
Fuel		WC Method		<1.0	<1.0	<1.0
Water	%	ASTM D6304		NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		▲ 3.0	3.5	0.6
Nitration	Abs/cm	*ASTM D7624		16.	17.	17.
Sulfation	Abs/.1mm	*ASTM D7415		49.	58.	49.
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	NEG
Sodium	ppm	ASTM D5185m		12	15	24
Boron	ppm	ASTM D5185m		2	2	1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		154	160	117
Manganese	ppm	ASTM D5185m		2	2	1
Magnesium	ppm	ASTM D5185m		4165	4094	3202
Calcium	ppm	ASTM D5185m		8410	8458	6426
Phosphorus	ppm	ASTM D5185m		1238	1222	959
Zinc	ppm	ASTM D5185m		1982	2046	1536
Oxidation	Abs/.1mm	*ASTM D7414		27.	33.	32.
Base Number (BN)	mg KOH/g	ASTM D2896		29.4	26.7	28.2
Visc @ 100°C	cSt	ASTM D445		▲ 20.8	23.3	16.9

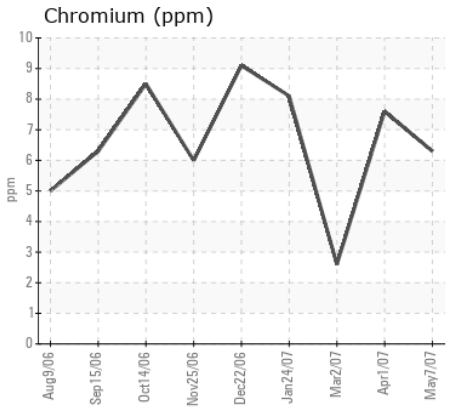


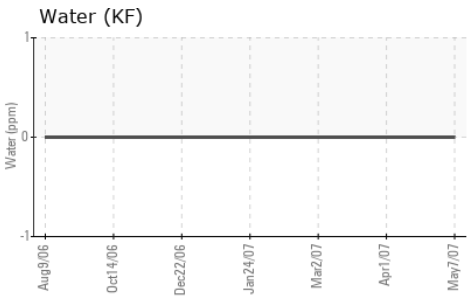


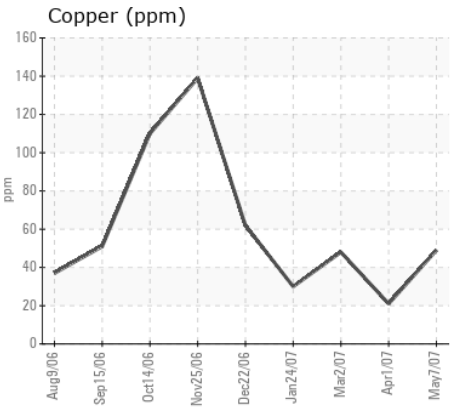


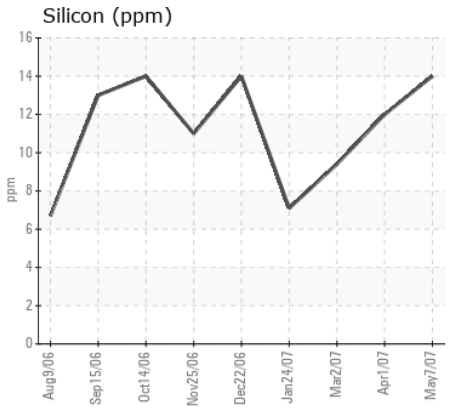


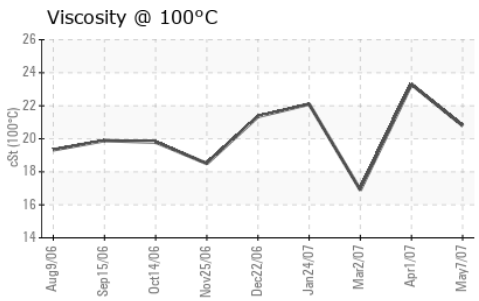


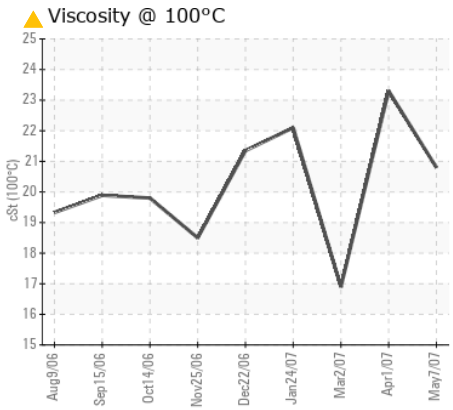


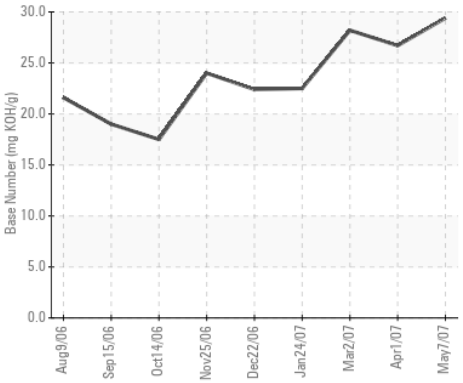












Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP025602 **Received** : 21 May 2007
Lab Number : 01963081 **Tested** : 25 May 2007
Unique Number : 4111776 **Diagnosed** : 25 May 2007 - Doug Bogart
Test Package : MOB 2 (Additional Tests: KF)

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)

OILMAX S.A.S.
AV 6 DICIEMBRE Y GASPAR CANTERO
QUITO-ECUADOR,
Contact: DANNY BARREIRO
oilmax.ec@gmail.com
T: (593)996-451694
F: x: