

LAB REPORT



Kerschelweg 28 · 83098 Brannenburg · Germany
Tel. +49 8034-9047-0 · info@oelcheck.de

Unit ID **Steam turbine**
Component **Lubricating oil and control fluid**
Current sample number **1701072**



page 1 of 3

OELCHECK GmbH · Postfach 1116 · 83094 Brannenburg

Machine type: **AFA 6 G3a**
Manufacturer: **KKK**
Oil brand name: **Mobil DTE 798**
Oil quantity in system: **600 l**

Example report
Analysis scope: Turbine Oil Kit 8

Diagnosis for the current laboratory values

No wear metals present in the sample. The cleanliness should be improved. The Air Release property is within the expected range. The foaming tendency is within the expected range. Please observe further changes with the next sample. I recommend that you send the next sample at the next service interval or at your regular inspection for trend analysis.

Dipl.-Ing. Stefan Mitterer

Sample Rating



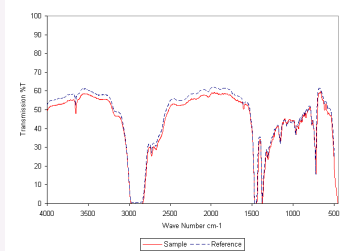
Caution

ANALYSIS RESULTS			Current sample	Previous samples	
LAB NUMBER			1701072	1701071	
SAMPLE RATING			?	✓	
Date tested			24.06.2014	18.06.2013	
Date of sample taken			19.06.2014	13.06.2013	
Date of last oil change			12.02.2013	12.02.2013	
Top-up since change	l		0	0	
Operating time since change	h		10259	17690	
Total operating time	h		10259	17690	
Oil changed			no	no	
WEAR					
Iron	Fe	mg/kg	0	0	
Chrome	Cr	mg/kg	0	0	
Tin	Sn	mg/kg	0	0	
Aluminum	Al	mg/kg	0	0	
Nickel	Ni	mg/kg	0	0	
Copper	Cu	mg/kg	0	0	
Lead	Pb	mg/kg	0	0	
Molybdenum	Mo	mg/kg	0	0	
PQ index	-		< 25	< 25	
CONTAMINATION					
Silicon	Si	mg/kg	0	0	
Potassium	K	mg/kg	0	0	
Sodium	Na	mg/kg	2	0	
Lithium	Li	mg/kg	0	0	
Water K. F.	ppm		< 15	26	
OIL CONDITION					
Viscosity at 40°C	mm²/s		45.10	45.64	
Viscosity at 100°C	mm²/s		6.93	6.95	
Viscosity index	-		110	109	
Oxidation	A/cm		2	1	
Phenolic Inhibitor	%		89	86	
Color	Color index		1.5	1.5	
ADDITIVES					
Calcium	Ca	mg/kg	1	0	
Magnesium	Mg	mg/kg	0	0	
Boron	B	mg/kg	0	0	
Zinc	Zn	mg/kg	0	0	
Phosphorus	P	mg/kg	49	47	
Barium	Ba	mg/kg	0	0	
Sulphur	S	mg/kg	234	229	

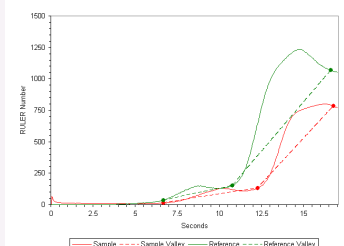
Bottle and Cap



Infrared Spectrum



RULER Diagram



LAB REPORT



Kerschelweg 28 · 83098 Brannenburg · Germany
Tel. +49 8034-9047-0 · info@oelcheck.de



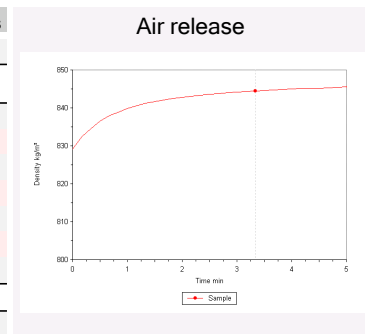
Unit ID **Steam turbine**
Component **Lubricating oil and control fluid**
Current sample number **1701072**

page 2 of 3

Machine type: **AFA 6 G3a**
Manufacturer: **KKK**
Oil brand name: **Mobil DTE 798**
Oil quantity in system: **600 l**

Example report
Analysis scope: Turbine Oil Kit 8

ANALYSIS RESULTS		Current sample	Previous samples	
LAB NUMBER		1701072	1701071	
SAMPLE RATING		?	✓	
Date tested		24.06.2014	18.06.2013	
Date of sample taken		19.06.2014	13.06.2013	
Date of last oil change		12.02.2013	12.02.2013	
Top-up since change	l	0	0	
Operating time since change	h	10259	17690	
Total operating time	h	10259	17690	
Oil changed		no	no	
ADDITIONAL TESTS				
AN / NN	mgKOH/g	0.08	0.08	
Air release	min	5.5	3.8	
Water separation (steam)	s	257	149	
Foam test seq. I	ml/ml	370/0	220/0	
Cleanliness class	ISO 4406 (1999)	22/19/14	20/16/12	
RULER Additive 1	%	87.3	73.1	
RULER Additive 2	%	47.1	44.9	



Unit ID **Steam turbine**
 Component **Lubricating oil and control fluid**
 Current sample number **1701072**

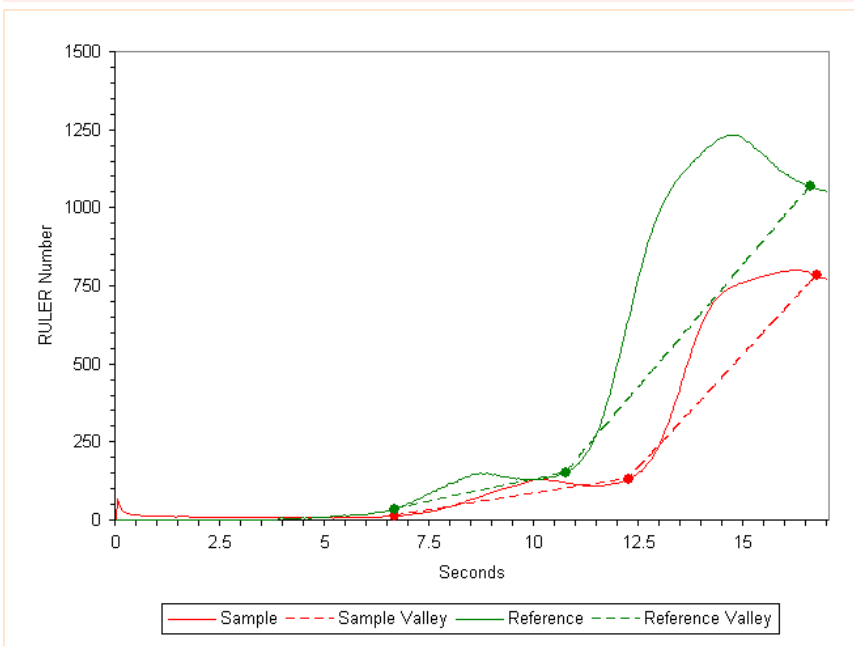
Machine type: **AFA 6 G3a**
 Manufacturer: **KKK**
 Oil brand name: **Mobil DTE 798**
 Oil quantity in system: **600 l**

Example report
 Analysis scope: Turbine Oil Kit 8

Diagnosis of RULER test

The RULER graph clearly indicates the presence of phenolic and aminic antioxidants. The content of phenolic antioxidants has decreased slightly. The lubricant resistance against oxidation is sufficient.

Dipl.-Ing. Stefan Mitterer



ANALYSIS RESULTS		Current sample
LAB NUMBER		1701072
Date tested		24.06.2014
Date of sample taken		19.06.2014
Date of last oil change		12.02.2013
Top-up since change	l	0
Operating time since change	h	10259
Total operating time	h	10259
Oil changed		no

Antioxidant/residual content		
RULER Additive 1	%	87,3
RULER Additive 2	%	47,1