

Unit ID **Gas turbine**  
 Component **Lubricating oil**  
 Current sample number **1700834**

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OELCHECK GmbH · Kerschelweg 28 · 83098 Brannenburg

Machine type: **Gas turbine**  
 Manufacturer: **ABC**  
 Oil brand name: **Mobil DTE 832**  
 Oil quantity in system: **4300 l**

Example report  
 Analysis scope: Turbine Oil Kit 7

### Diagnosis for the current laboratory values

No wear metals present in the sample. Viscosity and additive levels are in the normal range. The air release property is at the level of fresh oil. The foaming tendency is the same as that of fresh oil. If no oil change has happened yet, it is possible to continue using the oil under similar operating conditions and under continuation of the usual maintenance schedule. I recommend that you send the next sample at the next service interval or at your regular inspection for trend analysis.

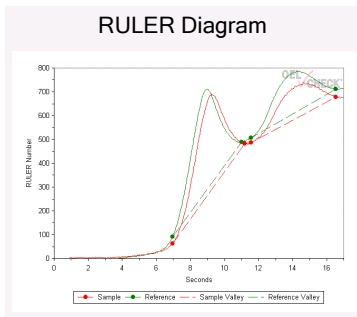
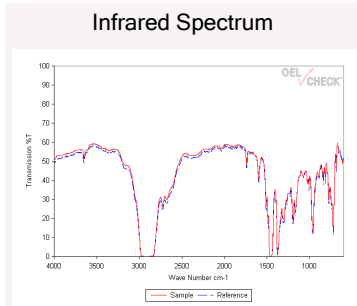
Dipl.-Ing. Stefan Mitterer

### Sample Rating



**normal**

ANALYSIS RESULTS			Current sample	1700835	Previous samples
<b>LAB NUMBER</b>			<b>1700834</b>	1700835	
<b>SAMPLE RATING</b>					
Date tested			<b>31.10.2019</b>	23.11.2018	
Date of sample taken			<b>27.10.2019</b>	14.11.2018	
Date of last oil change			<b>24.07.2019</b>	01.10.2013	
Top-up since change	l		<b>200</b>	2400	
Operating time since change	h		<b>665</b>	32856	
Total operating time	h		<b>38211</b>	32856	
Oil changed			<b>no</b>	no	
<b>WEAR</b>					
Iron	Fe	mg/kg	<b>0</b>	0	
Chrome	Cr	mg/kg	<b>0</b>	0	
Tin	Sn	mg/kg	<b>0</b>	0	
Aluminum	Al	mg/kg	<b>0</b>	0	
Nickel	Ni	mg/kg	<b>0</b>	0	
Copper	Cu	mg/kg	<b>0</b>	0	
Lead	Pb	mg/kg	<b>0</b>	0	
Molybdenum	Mo	mg/kg	<b>0</b>	0	
PQ index	-		<b>&lt; 25</b>	< 25	
<b>CONTAMINATION</b>					
Silicon	Si	mg/kg	<b>0</b>	0	
Potassium	K	mg/kg	<b>0</b>	0	
Sodium	Na	mg/kg	<b>0</b>	0	
Lithium	Li	mg/kg	<b>0</b>	0	
Water K. F.	ppm		<b>85</b>	91	
<b>OIL CONDITION</b>					
Viscosity at 40°C	mm²/s		<b>32.46</b>	32.05	
Viscosity at 100°C	mm²/s		<b>5.80</b>	5.76	
Viscosity index	-		<b>122</b>	122	
Oxidation	A/cm		<b>1</b>	1	
IR index	-		<b>99.25</b>	99.10	
Phenolic Inhibitor	%		<b>94</b>	66	
Color	Color index		<b>1.0</b>	4.0	
<b>ADDITIVES</b>					
Calcium	Ca	mg/kg	<b>2</b>	0	
Magnesium	Mg	mg/kg	<b>0</b>	0	
Boron	B	mg/kg	<b>1</b>	0	
Zinc	Zn	mg/kg	<b>1</b>	0	
Phosphorus	P	mg/kg	<b>1099</b>	1155	
Barium	Ba	mg/kg	<b>0</b>	0	
Sulphur	S	mg/kg	<b>56</b>	140	



# LAB REPORT

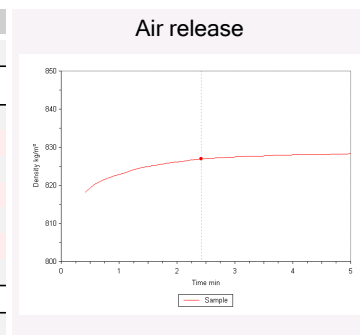
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 Component **Lubricating oil**  
 Current sample number **1700834**



Example report  
 Analysis scope: Turbine Oil Kit 7

Machine type: **Gas turbine**  
 Manufacturer: **ABC**  
 Oil brand name: **Mobil DTE 832**  
 Oil quantity in system: **4300 l**

ANALYSIS RESULTS	Current sample	Previous samples		
<b>LAB NUMBER</b>	<b>1700834</b>	1700835		
<b>SAMPLE RATING</b>	✓	✓		
Date tested	31.10.2019	23.11.2018		
Date of sample taken	27.10.2019	14.11.2018		
Date of last oil change	24.07.2019	01.10.2013		
Top-up since change	l 200	2400		
Operating time since change	h 665	32856		
Total operating time	h 38211	32856		
Oil changed	no	no		
<b>ADDITIONAL TESTS</b>				
AN / NN	mgKOH/g	0.03	0.12	
Air release	min	2.4	2.8	
Foam test seq. I	ml/ml	140/0	220/0	
Cleanliness class	ISO 4406	15/13/10	16/14/10	
>4µm (ISO)	Particles/100ml	30213	61254	
>6µm (ISO)	Particles/100ml	7547	14587	
>14µm (ISO)	Particles/100ml	889	888	
RULER Additive 1	%	91.3	58.1	
RULER Additive 2	%	84.7	49.8	



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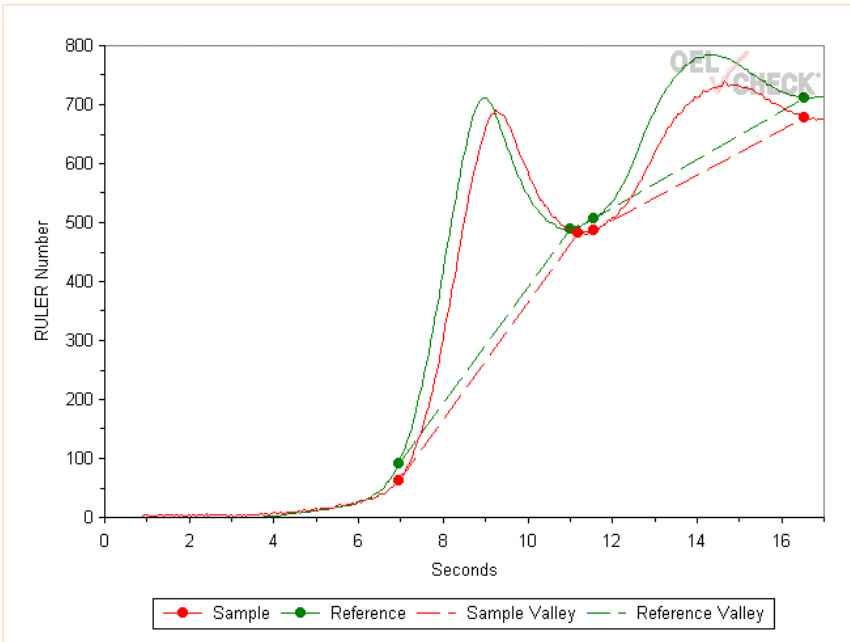
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 Manufacturer: **ABC**  
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### Diagnosis of RULER test

In comparison with the reference sample from our database, there are no significant changes of antioxidant additives (oxidation inhibitors).

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<b>LAB NUMBER</b>		<b>1700834</b>
Date tested		31.10.2019
Date of sample taken		27.10.2019
Date of last oil change		24.07.2019
Top-up since change	l	200
Operating time since change	h	665
Total operating time	h	38211
Oil changed		no

Antioxidant/residual content		
RULER Additive 1	%	91,3
RULER Additive 2	%	84,7