

LAB REPORT

Unit id
STEAM TURBINE
Component
Lubricating oil 5T



Lab number: 1704501

Machine type
MAN Turbo

Manufacturer
Rosaxno

Oil brand name
Mobil DTE 846

Oil quantity in system
15000

Sample report
Scope of analysis: Turbine Set 5 (Intermediate check)

No wear metals are detectable in the sample. We cannot detect any unusual oil oxidation. The air release behavior ARB has slightly improved. All other determined data are within the permissible or expected values. If no oil change has been performed yet, continued use of the oil would be possible under similar operating conditions while maintaining routine maintenance work. I recommend: Send us the next sample at your next maintenance or during the regular inspection to monitor the trend behavior.

Dipl.-Ing. Andy Böhme (CLS)



NORMAL

ANALYSIS RESULTS			Current sample	Previous samples →			
Lab number			1704501	1704503	1704504	1704505	
SAMPLE RATING			✓	✓	✓	✓	
Date of examination			19.09.2025	23.06.2025	14.04.2025	20.01.2025	
Date of sample taken			12.09.2025	12.06.2025	05.04.2025	12.01.2025	
Date of last oil change			-	-	-	-	
Top-up since change			-	-	-	-	
Operating time since change			7680 h	5472 h	3840 h	2040 h	
Total operating time			222094 h	219762 h	218254 h	216454 h	
Oil changed			no	no	no	no	
WEAR							
Iron	Fe	mg/kg	0	0	0	0	
Chrome	Cr	mg/kg	0	0	0	0	
Tin	Sn	mg/kg	0	0	0	0	
Aluminum	Al	mg/kg	0	1	1	0	
Nickel	Ni	mg/kg	0	0	0	0	
Copper	Cu	mg/kg	0	0	1	1	
Lead	Pb	mg/kg	0	0	1	0	
Molybdenum	Mo	mg/kg	0	0	0	0	
Manganese	Mn	mg/kg	0	0	0	0	
PQ index	-	-	< 25	< 25	< 25	< 25	
CONTAMINATION							
Silicon	Si	mg/kg	0	0	0	0	
Potassium	K	mg/kg	0	0	0	0	
Sodium	Na	mg/kg	0	0	0	3	
Lithium	Li	mg/kg	0	0	0	0	
Water K. F.		ppm	-	< 30	-	< 30	
Water		%	< 0.10	-	< 0.10	-	

LAB REPORT

Unit id
STEAM TURBINE
 Component
Lubricating oil 5T



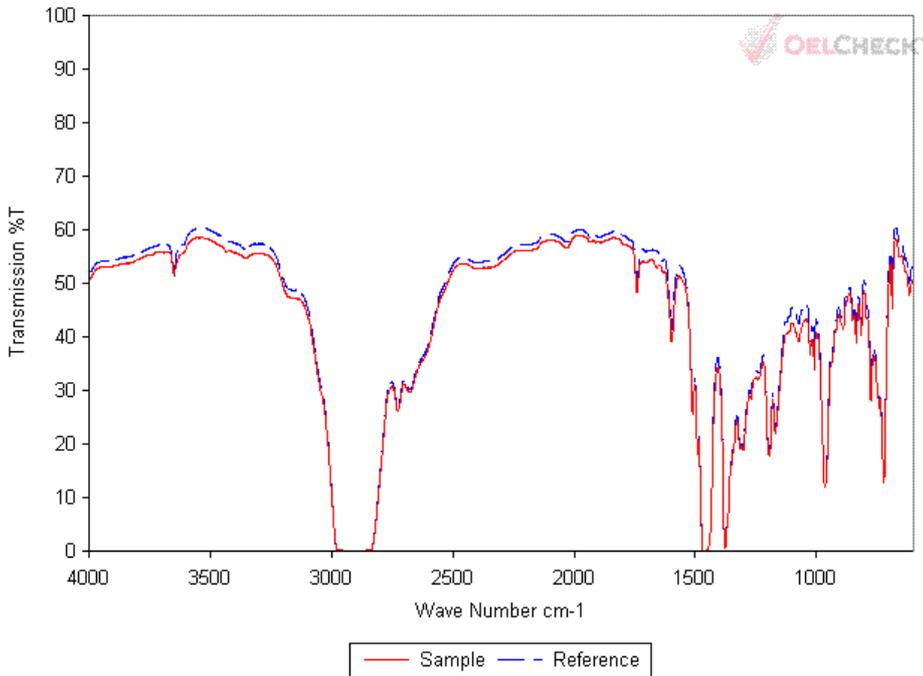
ANALYSIS RESULTS (...)		Current sample	Previous samples →			
Lab number		1704501	1704503	1704504	1704505	
SAMPLE RATING		✓	✓	✓	✓	
Date of examination		19.09.2025	23.06.2025	14.04.2025	20.01.2025	
Date of sample taken		12.09.2025	12.06.2025	05.04.2025	12.01.2025	
OIL CONDITION						
Viscosity at 40 °C	mm ² /s	43.68	44.01	43.61	43.86	
Viscosity at 100 °C	mm ² /s	7.01	7.11	7.02	7.01	
Viscosity index	-	119	121	120	118	
Oxidation	A/cm	1	1	1	1	
IR index	-	99.82	99.40	99.70	99.92	
Color	Farbzahl	1.5	1.5	1.0	0.5	
ADDITIVES						
Calcium	Ca	mg/kg	0	0	0	0
Magnesium	Mg	mg/kg	0	0	0	0
Boron	B	mg/kg	0	0	0	0
Zinc	Zn	mg/kg	0	0	2	0
Phosphorus	P	mg/kg	1134	1100	1156	1168
Barium	Ba	mg/kg	0	0	0	0
Sulphur	S	mg/kg	13	22	27	36
ADDITIONAL TESTS						
AN / NN	mgKOH/g	0.10	< 0.10	< 0.10	< 0.10	
MPC		-	3.70	-	2.50	
Air-release properties	min	2.6	3.4	3.1	2.9	
Air release at temperature	°C	50	50	50	50	
Water separation (steam)	s	-	172	-	157	
Foam test seq. I	ml/ml		450/0		230/0	
Cleanliness class	ISO 4406		18/17/14		17/15/12	
A: >4µm = ISO >4µm	Anzahl/100ml	-	188478	-	79419	
B: >6µm = ISO >6µm	Anzahl/100ml	-	78021	-	25424	
C: >14µm = ISO >14µm	Anzahl/100ml	-	12237	-	2697	
D: >21µm	Anzahl/100ml	-	3388	-	824	
E: >38µm	Anzahl/100ml	-	82	-	47	
F: >70µm	Anzahl/100ml	-	0	-	0	
Cleanliness class	SAE AS 4059		9B		7A	
Antioxidant 1 - RULER	%	-	89.6	-	86.6	
Antioxidant 2 - RULER	%	-	84.6	-	76.2	



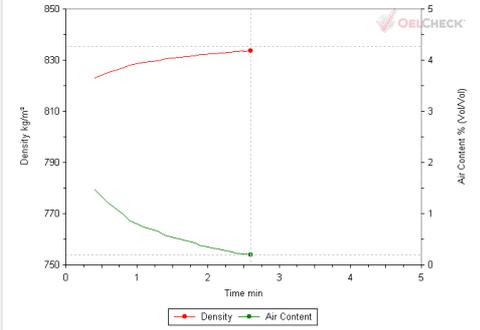
LAB REPORT

Unit id
STEAM TURBINE
Component
Lubricating oil 5T

SAMPLE IMAGES (LABORATORY NUMBER: 1704501)



INFRARED SPECTRUM



AIR-RELEASE PROPERTIES



BOTTLE AND CAP



Any questions?

Phone: +49 8034 9047-210
ta@oelcheck.de

LAB.REPORT



- View all laboratory reports at any time - Have them translated directly if required
- Flexible search and filter functions for quick results
- High-resolution images and graphics for optimal detail analysis
- Convenient creation of meaningful trend graphs



www.lab.report/
sample/1704501