

Unit ID **Steam turbine**
 Component **Lubricating oil 5T**
 Lab number **1704501**

+49 8034-9047-210

page 1 of 2

OELCHECK GmbH · Kerschelweg 28 · 83098 Brannenburg

Machine type: **MAN Turbo**
 Manufacturer: **Rosaxno**
 Oil brand name: **Mobil DTE 846**
 Oil quantity in system: **15000**

Example report
 Analysis scope: Turbine Oil Kit 5 (intermediate check)

Diagnosis for the current laboratory values

No wear metals present in the sample. We cannot detect significant oil oxidation. The Air Release property is slightly improved. All the other data detected are within the permissible or expected value range. 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. Andy Böhme (CLS)

Sample Rating



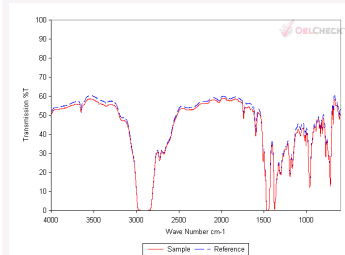
normal

ANALYSIS RESULTS			Current sample	Previous samples		
LAB NUMBER			1704501	1704503	1704504	1704505
SAMPLE RATING						
Date tested			19.09.2023	21.06.2023	14.04.2023	20.01.2023
Date of sample taken			12.09.2023	12.06.2023	05.04.2023	12.01.2023
Date of last oil change			-	-	-	-
Top-up since change			-	-	-	-
Operating time since change			h 7680	5472	3840	2040
Total operating time			h 222094	219762	218254	216454
Oil changed			no	no	no	no
WEAR						
Iron	Fe	mg/kg	0	0	0	0
Chrom	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	-
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	Color index	-	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

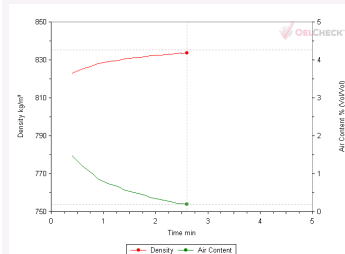
Bottle and cap



Infrared Spectrum



Air-release properties



LAB REPORT

Unit ID **Steam turbine**
 Component **Lubricating oil 5T**
 Lab number **1704501**

+49 8034-9047-210

page 2 of 2

Machine type: **MAN Turbo**
 Manufacturer: **Rosaxno**
 Oil brand name: **Mobil DTE 846**
 Oil quantity in system: **15000**

Example report
 Analysis scope: Turbine Oil Kit 5 (intermediate check)

ANALYSIS RESULTS		Current sample	Previous samples		
LAB NUMBER		1704501	1704503	1704504	1704505
SAMPLE RATING		✓	✓	✓	✓
Date tested		19.09.2023	21.06.2023	14.04.2023	20.01.2023
Date of sample taken		12.09.2023	12.06.2023	05.04.2023	12.01.2023
Date of last oil change		-	-	-	-
Top-up since change		-	-	-	-
Operating time since change h		7680	5472	3840	2040
Total operating time h		222094	219762	218254	216454
Oil changed		no	no	no	no
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	Particles/100ml	-	188478	-	79419
B: >6µm = ISO >6µm	Particles/100ml	-	78021	-	25424
C: >14µm = ISO >14µm	Particles/100ml	-	12237	-	2697
D: >21µm	Particles/100ml	-	3388	-	824
E: >38µm	Particles/100ml	-	82	-	47
F: >70µm	Particles/100ml	-	0	-	0
Cleanliness class	SAE AS 4059	-	9B	-	7A
Antioxidant 1 - RULER	%	-	89.6	-	86.6
Antioxidant 2 - RULER	%	-	84.6	-	76.2

