## LAB REPORT

Unit ID Lubricating grease

Component Rolling bearing

Current sample number 1700756





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OELCHECK GmbH  $\cdot$  Postfach 1116  $\cdot$  83094 Brannenburg

Example report

Analysis scope: Analysis-Kit 4

Machine type: ABC
Manufacturer: Siemens
Grease type: Shell Retinax LX 2
Grease quantity: 200 g

## Diagnosis for the current laboratory values

Iron and copper have increased significantly through corrosion or abrasive wear. The water content has increased slightly. The measured oil loss in the bleeding test is very low. The grease can hardly absorb the necessary oil for lubrication. Possible reason: e.g. grease bleeding or destruction of thickener structure. The FT-IR spectrum shows significant differences relative to the reference sample. The old lubricant sould be removed from the bearing immediately or should be purged through increased lubrication from the lubrication point to avoid further wear or damage.

## Dipl.-Ing. Stefan Mitterer

## Sample Rating



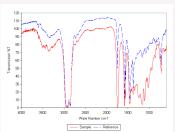
action

<b>ANALYSIS RESULTS</b>	3		Current sample		Previous samples
LAB NUMBER			1700756		
SAMPLE RATING			<u>•</u>		
Date tested			20.03.2015		
Date of sample taken			18.03.2015		
Date of last relubrication			14.10.2014		
Relubrication Quantity		g	20		
Relubrication Interval			-		
Total operating time		h	1180		
Relubrication			no		
WEAR					
Iron	Fe	mg/kg	849	_	
Chrome	Cr	mg/kg	15		
Tin	Sn	mg/kg	9		
Aluminum	Al	mg/kg	6		
Nickel	Ni	mg/kg	0		
Copper	Cu	mg/kg	3521		
Lead	Pb	mg/kg	92		
PQ index	-		63		
CONTAMINATION					
Silicon	Si	mg/kg	29		
Potassium	K	mg/kg	132		
Sodium	Na	mg/kg	691		
Water K. F.	ppm		1568		
ADDITIVES					
Calcium	Ca	mg/kg	1720		
Magnesium	Mg	mg/kg	10		
Boron	В	mg/kg	1864		
Zinc	Zn	mg/kg	2152		
Phosphorus	Р	mg/kg	825		
Barium	Ba	mg/kg	9		
Molybdenum	Мо	mg/kg	0		
ADDITIONAL TESTS					
Bleeding test, oil loss	% Wt.		5.0		
Bleeding test, oil spot ø	mm		34		





Infrared Spectrum



Bleeding test, oil spot ø





