## LAB REPORT

Unit ID Forming press

Component Hydraulic

Current sample number 1700767





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

Example report

Analysis scope: Analysis-Kit 4

Machine type: Manufacturer: Oil brand name: Oil quantity in system: 500to Schuler Hydrap Shell Tellus 46 5000 I

#### Diagnosis for the current laboratory values

Wear metals are only present in negligible concentrations. Hardly any abrasive or corrosive wear is therefore visible. The additive elements differ from the fresh oil. Possible reasons could be a different oil type or mixture with another oil type. Please observe the system to see whether it has an increased foaming tendency. Oil cleanliness is lower than recommended by component manufacturers. The oil cleanliness should be improved by changing the filter element or by additional bypass filtration. Please observe further changes with the next sample. Please send us another sample on the occasion of your next inspection, but no later than six months from now.

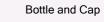
### Dipl.-Ing. Hendrik Karl

## Sample Rating



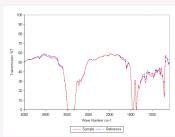
## Caution

ANALYSIS RESULTS			Current sample		Previous samples	
LAB NUMBER			1700767	1700768		
SAMPLE RATING			?	$\checkmark$		
Date tested			26.06.2014	23.10.2013		
Date of sample taken			25.06.2014	21.10.2013		
Date of last oil change		01.01.2005	01.01.2005			
Top-up since change		2000	1500			
Operating time since change a		а	8,5	8		
Total operating time		h	44708	40109		
Oil changed			no	no		
WEAR						
Iron	Fe	mg/kg	3	3		
Chrome	Cr	mg/kg	1	1		
Tin	Sn	mg/kg	1	0		
Aluminum	Al	mg/kg	0	0		
Nickel	Ni	mg/kg	0	0		
Copper	Cu	mg/kg	3	3		
Lead	Pb	mg/kg	0	0		
Molybdenum	Мо	mg/kg	0	0		
PQ index	-		< 25	< 25		
CONTAMINATION						
Silicon	Si	mg/kg	0	0		
Potassium	K	mg/kg	3	2		
Sodium	Na	mg/kg	2	1		
Water K. F.	ppm		123	97	 	
OIL CONDITION						
Viscosity at 40°C	mm²/s		48.40	47.40		
Viscosity at 100°C	mm²/s		6.94	6.75		
Viscosity index	-		98	94		
Oxidation	A/cm		2	3		
ADDITIVES						
Calcium	Ca	mg/kg	112	51		
Magnesium	Mg	mg/kg	0	0		
Boron	В	mg/kg	0	0		
Zinc	Zn	mg/kg	650	311		
Phosphorus	Р	mg/kg	431	298		
Barium	Ва	mg/kg	3	3		
Sulphur	S	mg/kg	5412	2131		





Infrared Spectrum







# LAB REPORT

Forming press Unit ID

Hydraulic Component

1700767 Current sample number





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500to Schuler Hydrap Shell Tellus 46 5000 I Machine type: Manufacturer: Oil brand name:

Oil quantity in system:

Example	report
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Analysis scope: Analysis-Kit 4

ANALYSIS RESULTS	3	Current sample		Previous samples
LAB NUMBER		1700767	1700768	
SAMPLE RATING		?	<b>✓</b>	
Date tested		26.06.2014	23.10.2013	
Date of sample taken		25.06.2014	21.10.2013	
Date of last oil change		01.01.2005	01.01.2005	
Top-up since change	1	2000	1500	
Operating time since change a		8,5	8	
Total operating time	h	44708	40109	
Oil changed		no	no	
ADDITIONAL TESTS				
AN / NN	mgKOH/g	0.53	0.33	
Cleanliness class	ISO 4406 (1999)	20/18/14	18/13/11	
A: >4μm = ISO >4μm	Particles/100ml	691090	201860	
B: >6μm = ISO >6μm	Particles/100ml	147370	4540	
C: >14μm = ISO >14μm	Particles/100ml	13890	1110	
D: >21μm	Particles/100ml	4890	960	
E: >38μm	Particles/100ml	600	390	
F: >70µm	Particles/100ml	70	40	
Cleanliness class	leanliness class SAE AS 4059		9A	



