LABORATORY REPORT

Sample description	**KT10SA01HY05**
Component	**Hydraulic**
Number of the current sample	**2343141**

Machine type:	Hydraulic system line 03
Manufacturer:	Viereck
Name of the oil:	BP Energol HLP-HM 46
Amount of oil in the system:	650 l

Diagnosis of the current laboratory values

#2343141 = KT10SA01HY05-1, before cleaning with an ultra fine filtering unit. Iron has slightly increased. Silicon has slightly increased. In most cases it is dust, sometimes it is also non-abrasive acting silicone components of installation aids, grease containing silicone, or elastic seals. The purity class of the oil complies with the requirements. I advise you: Send us the next sample during your next maintenance or during the normal inspection in order to observe the trend behavior.

Graduate engineer (FH) Stefan Mitterer

Overall evaluation

Note

ANALYSIS RESULTS LABORATORY NUMBER			Current sample 2343141	Previous investigations
OVERALL EVALUATION				
Date of investigation			27.12.2012	
Date of sampling			03.12.2012	
Date of last oil change			15.11.2011	
Refilling amount since change			-	
Duration since change	h		1656	
Whole duration	m		12	
Changing of oil			No	
WEAR				
Iron	Fe	mg/kg	13	
Chrome	Cr	mg/kg	0	
Tin	Sn	mg/kg	1	
Aluminium	Al	mg/kg	3	
NIckel	Ni	mg/kg	0	
Copper	Cu	mg/kg	4	
Lead	Pb	mg/kg	0	
Molybdenum	Mo	mg/kg	0	
PQ index	-		OK	
CONTAMINATION				
Silicon	Si	mg/kg	11	
Potassium	K	mg/kg	0	
Sodium	Na	mg/kg	0	
Water K.F.		ppm	39	

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OIL CONDITION
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Viscosity at 40°C	mm²/s		45.38
Viscosity at 100°C	mm²/s		6.80
Viscosity index	-		104
Oxidation	A/cm		1

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ADDITIVES
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Calcium	Ca	mg/kg	37
Magnesium	Mg	mg/kg	0
Boron	B	mg/kg	0
Zinc	Zn	mg/kg	403
Phosphorus	P	mg/kg	316
Barium	Ba	mg/kg	0
Sulphur	S	mg/kg	2005

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ADDITIONAL TESTS
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Purity class	ISO 4406 (1999)	22/16/10
A: >4µm=ISO >4µm	Number/100ml	2642970
B: >6µm=ISO >6µm	Number/100ml	40220
C: >14µm=ISO>14µm	Number/100ml	924
D: >21µm	Number/100ml	287
E: >38µm	Number/100ml	50
F: >70µm	Number/100ml	17
Purity class	SAE AS 4059	12A

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Sample and lid

Infrared spectrum