

LAB REPORT

Sample ID number **99999999**
 Component **2-Takt-Dieselmotor, Systemöl**
 Current sample number **1700974**



OELCHECK GmbH · Postfach 1116 · 83094 Brannenburg

Kittiwake GmbH
 Marie-Curie-Straße 5
 25337 Elmshorn

Vessel name: **MV Demo Express**
 Company: **Kittiwake**
 Engine/Equipment maker: **Sulzer**
 Engine/Equipment type: **9 RTA 96 C-B**
 Engine ID: **Main Engine**
 Oil brand name: **BP Energol OE-HT 30**

Diagnosis for the current laboratory values

IR Water: <0.1%

There is no significant change in comparison to the previous sample. The wear values are in the normal range. The trend line of Nickel and Vanadium is stable. The water content is within the normal range. Please observe further changes with the next sample. I recommend that you send the next sample at the next service interval or at your regular inspection for trend analysis.

Dipl.-Ing. Steffen Bots

Sample Rating



normal

ANALYSIS RESULTS			Current sample	Previous samples		
LAB NUMBER			1700974	1700975	1700976	
SAMPLE RATING			✓	?	🔥	
Date tested			19.10.2009	30.09.2009	30.09.2009	
Date sample taken			30.09.2009	20.09.2009	20.08.2009	
Date of last oil change			-	-	-	
Top-up since change			-	0	0	
Operating hrs since change	h		44461	44200	0	
Total operating hrs	h		44461	44200	0	
Oil changed			-	-	-	
WEAR						
Iron	Fe	mg/kg	9	9	0	
Chrome	Cr	mg/kg	0	0	0	
Tin	Sn	mg/kg	0	0	0	
Aluminum	Al	mg/kg	0	0	0	
Nickel	Ni	mg/kg	3	3	0	
Copper	Cu	mg/kg	5	5	0	
Lead	Pb	mg/kg	1	1	0	
PQ index	-		OK	OK	OK	
CONTAMINATION						
Silicon	Si	mg/kg	5	5	7	
Potassium	K	mg/kg	1	2	2	
Sodium	Na	mg/kg	3	3	1	
Vanadium	V	mg/kg	9	8	-	
Water K. F.	ppm		498	444	442	
Glycol	-		negative	negative	negative	
Soot content	%		< 0.1	< 0.1	< 0.1	
OIL CONDITION						
Viscosity at 40°C	mm²/s		113.19	112.96	109.31	
Viscosity at 100°C	mm²/s		11.94	11.87	11.68	
Viscosity index	-		94	93	94	
Oxidation	A/cm		1	1	-	
Nitration	A/cm		0	1	-	
Sulfation	A/cm		3	0	-	
Dispersancy	%		95	94	-	
ADDITIVES						
Calcium	Ca	mg/kg	2970	2896	2081	
Magnesium	Mg	mg/kg	3	3	0	
Boron	B	mg/kg	0	0	0	
Zinc	Zn	mg/kg	325	304	333	
Phosphorous	P	mg/kg	238	227	279	
Barium	Ba	mg/kg	0	0	0	
Molybdenum	Mo	mg/kg	0	0	0	
Sulphur	S	mg/kg	6993	7199	6315	
ADDITIONAL TESTS						
BN	mgKOH/g		7.58	7.59	6.51	

