

Diagnosis for the current laboratory values

The sample is transparent and free of solid contaminants. The typical anti-freeze (glycol) additives and the glycol concentration are visible. The sulphate content is slightly elevated. All other analysis data are within the permissible or expected value 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. Matthias Aßmann

Sample Rating



normal

ANALYSIS RESULTS		Current sample	Previous samples	
LAB NUMBER		3496857	3391746	
SAMPLE RATING		✓	✓	
Date tested		09.02.2018	29.05.2017	
Date of sample taken		07.02.2018	22.05.2017	
Date of last coolant change		-	-	
Top-up since change		-	-	
Operating time since change		-	1720	
Total operating time h		5500	1720	
Coolant changed		no	no	
CONDITION				
Color		pink	pink	
Refractive index 20°C		1.3740	1.3742	
Glycol concentration % [Vol/Vol]		39.4	39.5	
Density 20°C kg/m³		1053	1053	
pH value 25°C		8.1	8.1	
Conductivity 25°C µS/cm		2731	2063	
Freezing point °C		-22.6	-22.8	
WATER QUALITY				
Water hardness °dH		2.4	3.6	
Alkaline earths mmol/l		0.43	0.65	
Calcium Ca mg/l		17.2	24.0	
Magnesium Mg mg/l		0.0	1.2	
Sulphate mg/l		52.3	50.7	

Bottle and Cap



Sample on the side



ADDITIVES

Sodium	Na	mg/l	2641.7	2606.7		
Phosphorus	P	mg/l	0.0	0.0		
Boron	B	mg/l	0.0	0.3		
Potassium	K	mg/l	25.6	15.7		
Silicon	Si	mg/l	1.4	2.3		
Molybdenum	Mo	mg/l	0.0	0.0		
Nitrate	mg/l		< 5.0	< 5.0		
Nitrite	mg/l		< 5.0	< 5.0		
Phosphate	mg/l		< 5.0	< 5.0		
Adipic acid	mg/l		< 5.0	< 5.0		

WEAR

Iron	Fe	mg/l	0.0	0.0		
Chrome	Cr	mg/l	0.0	0.0		
Aluminum	Al	mg/l	0.0	0.0		
Nickel	Ni	mg/l	0.0	0.0		
Copper	Cu	mg/l	0.0	0.0		
Lead	Pb	mg/l	0.0	0.0		
Zinc	Zn	mg/l	0.0	0.0		
Tin	Sn	mg/l	0.0	0.0		

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Total operating time		h		5500	1720		
Coolant changed				no	no		
DEGRADATION PRODUCT							
Glycolate		mg/l		30.2	18.8		
Formiate		mg/l		18.7	13.7		
Oxalate		mg/l		< 5.0	< 5.0		
Acetate		mg/l		< 5.0	< 5.0		
CONTAMINATION							
Fluoride		mg/l		< 5.0	< 5.0		
Bromide		mg/l		< 10.0	< 10.0		
Manganese		Mn	mg/l	0.0	0.0		
Titanium		Ti	mg/l	0.0	0.0		
Vanadium		V	mg/l	0.0	0.0		
Silver		Ag	mg/l	0.0	0.0		
Lithium		Li	mg/l	0.0	0.0		