

[673135] Machine Id SENNEBOGEN 840 840.0.2369

Component Hydraulic System

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAN

All component wear rates are normal.

CONTAMINATION

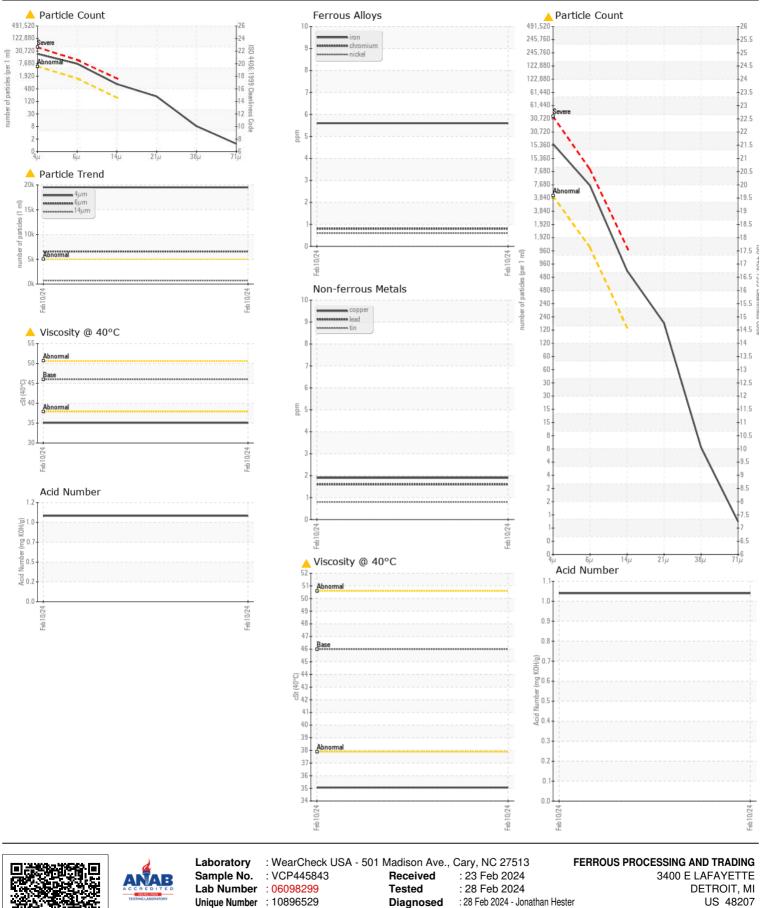
There is a high amount of particulates present in the oil.

FLUID CONDITION

The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

.....

TestUOMMethodLimit/AbnCurrentHistory1History1Sample NumberClient InfoVCP445843Sample DateClient Info10 Feb 2024Machine AgehrsClient Info2322Oil AgehrsClient Info2322Filter AgehrsClient Info0Oil ChangedClient InfoNot ChangedFilter ChangedClient InfoNot ChangedFilter ChangedClient InfoChangedSample StatusASTM D5185m<>206IronppmASTM D5185m<>10<1NickelppmASTM D5185m<>10<1SilverppmASTM D5185m<>10<1AluminumppmASTM D5185m<>10<1LeadppmASTM D5185m<>10<1VanadiumppmASTM D5185m<>10<1Yellow Metalscalar*VisualNONESiliconppmASTM D5185m<>202Yellow Metalscalar*VisualNONEYellow Metalscalar*VisualNONEYellow Metalscalar*VisualNONEP	y2
Sample Date Client Info 10 Feb 2024 Machine Age hrs Client Info 2322 Oil Age hrs Client Info 2322 Filter Age hrs Client Info 0 Oil Changed Client Info Not Changed Sample Status Client Info Changed Iron ppm ASTM D5185m<>20 6 Chromium ppm ASTM D5185m<>10 <1 Nickel ppm ASTM D5185m<>10 <1 Silver ppm ASTM D5185m<>10 <1 Aluminum ppm ASTM D5185m<>10 <1 Auminum ppm ASTM D5185m<>10 <1 Vanadium ppm ASTM D5185m<>10 <1	
Machine Age hrs Client Info 2322 Oil Age hrs Client Info 2322 Filter Age hrs Client Info 0 Oil Changed Client Info Not Changed Gil Changed Client Info Not Changed Filter Changed Client Info Changed Sample Status ABNORMAL Iron ppm ASTM D5185m<>20 6 Chromium ppm ASTM D5185m<>10 <1 Nickel ppm ASTM D5185m<>10 <1 Silver ppm ASTM D5185m<>10 <1 Auminum ppm ASTM D5185m<>10 2 Age ppm ASTM D5185m<>10 <1 <	
Oil AgehrsClient Info2322Filter AgehrsClient Info0Oil ChangedClient InfoNot ChangdFilter ChangedClient InfoChangedSample StatusClient InfoChangedIronppmASTM D5185m<>206ChromiumppmASTM D5185m<>10<1NickelppmASTM D5185m<>10<1SilverppmASTM D5185m<>10<1AluminumppmASTM D5185m<>10<1LeadppmASTM D5185m<>10<1VanadiumppmASTM D5185m<>10<1VanadiumppmASTM D5185m<>10<1VanadiumppmASTM D5185m<>10<1Yellow Metalscalar*VisualNONESiliconppmASTM D5185m<>202Yellow Metalscalar*VisualNONEPotassiumppmASTM D5185m<>202Particles >4µmASTM D7647>5000A 19499Particles >6µmASTM D7647>160A 709Particles >1µmASTM D7647>160A 709<	
Filter Age Oil ChangedhrsClient Info0Oil ChangedClient InfoNot ChangedFilter ChangedClient InfoChangedSample StatusClient InfoABNORMALIronppmASTM D5185m<>206ChromiumppmASTM D5185m<>10<1NickelppmASTM D5185m<>10<1TitaniumppmASTM D5185m<1<-1SilverppmASTM D5185m>10<1AluminumppmASTM D5185m>10<1LeadppmASTM D5185m>10<1YanadiumppmASTM D5185m>10<1VanadiumppmASTM D5185m>10<1Yellow Metalscalar*VisualNONENONESiliconppmASTM D5185m>202YaterWC Method>0.1NEGParticles >4µmASTM D7647>1300A 6569Particles >4µmASTM D7647>160709	
Oil ChangedClient InfoNot ChangedFilter ChangedClient InfoChangedSample StatusClient InfoABNORMALIronppmASTM D5185m<>206ChromiumppmASTM D5185m<>10<1NickelppmASTM D5185m<>10<1TitaniumppmASTM D5185m<1<-1SilverppmASTM D5185m<1<-1AluminumppmASTM D5185m>10<1LeadppmASTM D5185m>10<1CopperppmASTM D5185m>10<1VanadiumppmASTM D5185m>10<1VanadiumppmASTM D5185m>10<1Yellow Metalscalar*VisualNONENONESiliconppmASTM D5185m>202PotassiumppmASTM D5185m>202WaterWC Method>0.1NEGParticles >4µmASTM D7647>1300A 6569Particles >6µmASTM D7647>160A 709	
Filter Changed Sample Status Client Info Changed ABNORMAL Iron ppm ASTM D5185m >20 6 Chromium ppm ASTM D5185m >10 <1 Nickel ppm ASTM D5185m >10 <1 Nickel ppm ASTM D5185m >10 <1 Titanium ppm ASTM D5185m <1 Silver ppm ASTM D5185m <1 Aluminum ppm ASTM D5185m >10 <1 Lead ppm ASTM D5185m >10 <1 Vanadium ppm ASTM D5185m >10 <1 Vanadium ppm ASTM D5185m >10 <1 Vanadium ppm ASTM D5185m >10 <1 Yellow Metal scalar <th></th>	
Sample StatusABNORMALIronppmASTM D5185m>206ChromiumppmASTM D5185m>10<1NickelppmASTM D5185m>10<1TitaniumppmASTM D5185m>10<1SilverppmASTM D5185m>10<1AluminumppmASTM D5185m>10<1LeadppmASTM D5185m>10<1CopperppmASTM D5185m>10<1VanadiumppmASTM D5185m>10<1VanadiumppmASTM D5185m>10<1VanadiumppmASTM D5185m>10<1Yellow Metalscalar*VisualNONENONESiliconppmASTM D5185m>202SiliconppmASTM D5185m>202SiliconppmASTM D5185m>202PotassiumppmASTM D5185m>202Particles >4µmASTM D5185m>202Particles >4µmASTM D5185m>200A19499Particles >6µmASTM D7647>100 <th></th>	
Iron ppm ASTM D5185m >20 6 Chromium ppm ASTM D5185m >10 <1 I Nickel ppm ASTM D5185m >10 <1 I I Titanium ppm ASTM D5185m >10 <1 I I Silver ppm ASTM D5185m < <1 I I Aluminum ppm ASTM D5185m >10 <1 I I Lead ppm ASTM D5185m >10 <1 I I Copper ppm ASTM D5185m >10 <1 I I Vanadium ppm ASTM D5185m >10 <1 I I Vanadium ppm ASTM D5185m >10 <1 I I Vale scalar *Visual NONE NONE I I Vellow Metal scalar	
Iron ppm ASTM D5185m >20 6 Chromium ppm ASTM D5185m >10 <1 I Nickel ppm ASTM D5185m >10 <1 I I Titanium ppm ASTM D5185m >10 <1 I I Silver ppm ASTM D5185m < <1 I I Aluminum ppm ASTM D5185m >10 <1 I I Lead ppm ASTM D5185m >10 <1 I I Copper ppm ASTM D5185m >10 <1 I I Vanadium ppm ASTM D5185m >10 <1 I I Vanadium ppm ASTM D5185m >10 <1 I I Vale scalar *Visual NONE NONE I I Vellow Metal scalar	
Chromium ppm ASTM D5185m >10 <1	
Nickel ppm ASTM D5185m >10 <1	
Titanium ppm ASTM D5185m <1	
Silver ppm ASTM D5185m <1	
Aluminum ppm ASTM D5185m >10 <1	
Lead ppm ASTM D5185m >10 2 Copper ppm ASTM D5185m >75 2 Tin ppm ASTM D5185m >10 <1	
Copper ppm ASTM D5185m >75 2 Tin ppm ASTM D5185m >10 <1 Vanadium ppm ASTM D5185m >10 <1 White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Silicon ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 Particles >4µm ASTM D5185m >20 2 Particles >4µm ASTM D7647 >5000 A 19499 Particles >6µm ASTM D7647 >1300 A 6569 Particles >14µm ASTM D7647 >160 709	
Tin ppm ASTM D5185m >10 <1	
Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Silicon ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 Water WC Method >0.1 NEG Particles >4µm ASTM D7647 >5000 ▲ 19499 Particles >6µm ASTM D7647 >1300 ▲ 6569 Particles >14µm ASTM D7647 >160 ▲ 709	
White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Silicon ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 Water WC Method >0.1 NEG Particles >4µm ASTM D7647 >5000 ▲ 19499 Particles >6µm ASTM D7647 >1300 ▲ 6569 Particles >14µm ASTM D7647 >160 ▲ 709	
Yellow Metal scalar *Visual NONE NONE Silicon ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 Water WC Method >0.1 NEG Particles >4µm ASTM D7647 >5000 ▲ 19499 Particles >6µm ASTM D7647 >1300 ▲ 6569 Particles >14µm ASTM D7647 >160 ▲ 709	
Silicon ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 2 Water WC Method >0.1 NEG Particles >4µm ASTM D7647 >5000 ▲ 19499 Particles >6µm ASTM D7647 >1300 ▲ 6569 Particles >14µm ASTM D7647 >160 ▲ 709	
Potassium ppm ASTM D5185m >20 2 Water WC Method >0.1 NEG Particles >4µm ASTM D7647 >5000 ▲ 19499 Particles >6µm ASTM D7647 >1300 ▲ 6569 Particles >14µm ASTM D7647 >160 ▲ 709	
Potassium ppm ASTM D5185m >20 2 Water WC Method >0.1 NEG Particles >4µm ASTM D7647 >5000 ▲ 19499 Particles >6µm ASTM D7647 >1300 ▲ 6569 Particles >14µm ASTM D7647 >160 ▲ 709	
Water WC Method >0.1 NEG Particles >4μm ASTM D7647 >5000 ▲ 19499 Particles >6μm ASTM D7647 >1300 ▲ 6569 Particles >14μm ASTM D7647 >160 ▲ 709	
Particles >4μm ASTM D7647 >5000 ▲ 19499 Particles >6μm ASTM D7647 >1300 ▲ 6569 Particles >14μm ASTM D7647 >160 ▲ 709	
Particles >6μm ASTM D7647 >1300 ▲ 6569 Particles >14μm ASTM D7647 >160 ▲ 709	
Particles >14μm ASTM D7647 >160 Δ 709	
Particles >21µm ASTM D7647 >40 ▲ 180	
Particles >38μm ASTM D7647 >10 7	
Particles >71µm ASTM D7647 >3 1	
Oil Cleanliness ISO 4406 (c) >19/17/14 🔺 21/20/17	
Silt scalar *Visual NONE NONE	
Debris scalar *Visual NONE NONE	
Sand/Dirt scalar *Visual NONE NONE	
Appearance scalar *Visual NORML NORML	
Odor scalar *Visual NORML NORML	
Emulsified Water scalar *Visual >0.1 NEG	
Sodium ppm ASTM D5185m 0	
Boron ppm ASTM D5185m 14 0	
Barium ppm ASTM D5185m 0.0 5	
Molybdenum ppm ASTM D5185m 0.0 <1	
Manganese ppm ASTM D5185m 0.0 <1	
Magnesium ppm ASTM D5185m 2.6 24	
Calcium ppm ASTM D5185m 49 1156	
Phosphorus ppm ASTM D5185m 354 514	
Zinc ppm ASTM D5185m 419 638	
Sulfur ppm ASTM D5185m 3719 3812	
Acid Number (AN) mg KOH/g ASTM D8045 1.04	
Visc @ 40°C cSt ASTM D445 46 🔺 35.06	



Certificate 12367 Test Package : MOB 2 To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: KEITH HALL - FERDET

Page 2 of 2

T:

F:

Contact: KEITH HALL

keith.hall@fpt1.com