

Ascendum Machinery

SENNEBOGEN 821E RTH6 (S/N 82102749)

Propel Drive Gearbox

VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)

RECOMMENDATION	
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Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

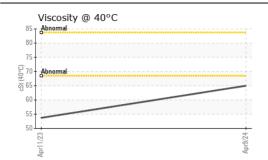
There is no indication of any contamination in the oil.

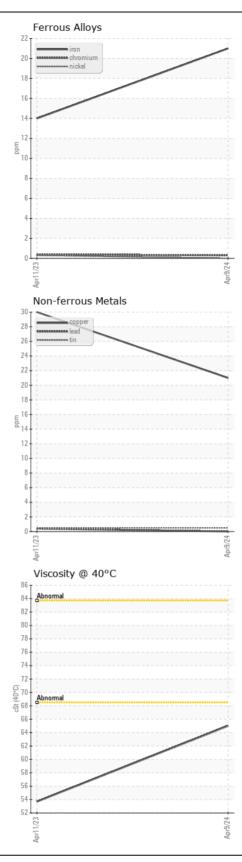
FLUID CONDITION

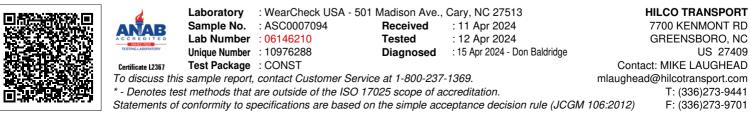
The condition of the oil is acceptable for the time in service.

TestUOMMethodLimit/MCurrentHistory1History2Sample NumberClient Info09 Apr202411 Apr2023Sample DateClient Info19391939Machine AgehrsClient Info19391939Oil AgehrsClient Info19391939Filter AgehrsClient InfoNot ChangedChangedOil ChangedClient InfoNot ChangedNoneN/AFilter ChangedClient InfoNoneN/ASample StatusClient InfoNoneN/ATronppmASTM D5185>2002114.4NickelppmASTM D5185>10<1SilverppmASTM D5185>100<1SilverppmASTM D5185I0<1AuminumppmASTM D5185I0<1VanadiumppmASTM D5185I0<1Yellow Metalscala"VisualNONENONENONEISilconppmASTM D5185I0<1Yellow Metalscala"VisualNONENONENONEISilconppmASTM D5185IIS1ISilconppmASTM D5185>20IS1Yellow Metalscala <th>/</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	/						
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Machine AgeIrsClient InfoIg391939Oil AgehrsClient InfoIg391939Filter AgehrsClient InfoNot ChangedChangedOil ChangedClient InfoNoneN/AFilter ChangedClient InfoNoneN/ASample StatusClient InfoNoneN/AIronppmASTM D5185m>2002114IronppmASTM D5185m>10c1NickelppmASTM D5185m>100-1SilverppmASTM D5185m00AluminumppmASTM D5185m00AgainumppmASTM D5185mC33VanadiumppmASTM D5185mC1VanadiumppmASTM D5185mC1ValdadiumppmASTM D5185mS20<-1ValdadiumppmASTM D5185mPNONENONEValdadiumppmASTM D5185mS20<-1ValdadiumppmASTM D5185mS20<-1ValdadiumppmASTM D5185mS20S20<1ValdadiumppmASTM D5185mS20S20Valdad	Sample Number		Client Info		ASC0007094	VCP0006685	
Oil AgehrsClient InfoImage1939ImageImageFilter AgehrsClient InfoNot ChangedChangedChangedChangedChangedChangedImageFilter ChangedImageClient InfoNoneN/AImageImageImageImageSample StatusImageS20021144Image <td< th=""><th>Sample Date</th><th></th><th>Client Info</th><th></th><th>09 Apr 2024</th><th>11 Apr 2023</th><th></th></td<>	Sample Date		Client Info		09 Apr 2024	11 Apr 2023	
Filter AgehrsClient Info00Oil ChangedClient InfoNot ChangdChangedFilter ChangedQClient InfoNoneN/ASample StatusNORMALNORMALIronppmASTM D5185m>2002114ChromiumppmASTM D5185m>10QNickelppmASTM D5185m10QTitaniumppmASTM D5185m0QSilverppmASTM D5185mQQAluminumppmASTM D5185mQQAgandiumppmASTM D5185mQQVanadiumppmASTM D5185mQQVanadiumppmASTM D5185mQQVanadiumppmASTM D5185mS20C1VanadiumppmASTM D5185mS20<-15VanadiumppmASTM D5185mS20<-15VanadiumppmASTM D5185mS20<-15VanadiumppmASTM D5185mS20<-15VanadiumppmASTM D5185mS20<-15SiliconppmASTM D5185mS20<15Silicon <td< th=""><th>Machine Age</th><th>hrs</th><th>Client Info</th><th></th><th>1939</th><th>1939</th><th></th></td<>	Machine Age	hrs	Client Info		1939	1939	
Oil ChangedClient InfoNot ChangedChangedFilter ChangedClient InfoNoneN/ASample StatusNORMALNORMALIronppmASTM D5185m>2002114ChromiumppmASTM D5185m>10<	Oil Age	hrs	Client Info		1939	1939	
Filter Changed Client Info None NA Sample Status Client Info NORMAL NORMAL NORMAL Iron ppm ASTM D5185m >200 21 14 Chromium ppm ASTM D5185m >10 0 <1 Nickel ppm ASTM D5185m >10 0 <1 Silver ppm ASTM D5185m 0 0 <1 Aluminum ppm ASTM D5185m 0 0 <1 Aluminum ppm ASTM D5185m 0 <1 Vanadium ppm ASTM	Filter Age	hrs	Client Info		0	0	
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Chromium ppm ASTM D5185m >10 <1	Sample Status				NORMAL	NORMAL	
Chromium ppm ASTM D5185m >10 <1				000	01		
NickelppmASTM D5185m>100<1	-						
Titanium ppm ASTM D5185m 0 <1							
Silver ppm ASTM D5185m 0 0 Aluminum ppm ASTM D5185m 0 <1 Lead ppm ASTM D5185m 0 <1 Copper ppm ASTM D5185m <21 30 Tin ppm ASTM D5185m <1 <1 Vanadium ppm ASTM D5185m <0 <1 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Silicon ppm ASTM D5185m >20 <1 5 Water WC Method >0.2 NEG NEG Silit scalar *Visual NONE NONE NONE Appearance scalar *Visual NORL NORML NORML Godium <t< th=""><th></th><th></th><th></th><th>>10</th><th>-</th><th></th><th></th></t<>				>10	-		
Aluminum ppm ASTM D5185m 3 3 Lead ppm ASTM D5185m 0 <1 Copper ppm ASTM D5185m 0 <1 Copper ppm ASTM D5185m <1 <1 Vanadium ppm ASTM D5185m <1 <1 Vanadium ppm ASTM D5185m <1 <1 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Silicon ppm ASTM D5185m >20 <1 5 Water WC Method >0.2 NEG NEG Debris scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML Godor s							
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Copper ppm ASTM D5185m 21 30 Tin ppm ASTM D5185m <1 <1 Vanadium ppm ASTM D5185m 0 <1 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Silicon ppm ASTM D5185m >20 <1 5 Silicon ppm ASTM D5185m >20 <1 5 Water WC Method >0.2 NEG NEG Sad/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORM NORML NORML Godr scalar *Visual NORM NORML NORML Appearance scalar *Visual NORM NORML							
TinppmASTM D5185m<1					-		
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White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiliconppmASTM D5185m>20<15PotassiumppmASTM D5185m>20<15WaterWC Method>0.2NEGNEGSilitscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLSodiumppmASTM D5185m2134BoronppmASTM D5185m0<1MalganeseppmASTM D5185m17<1ManganeseppmASTM D5185m22910MagnesiumppmASTM D5185m2097PhosphorusppmASTM D5185m21043528PhosphorusppmASTM D5185m10691176ZincppmASTM D5185m10691233SulfurppmASTM D5185m83728925							
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SiliconppmASTM D5185m98PotassiumppmASTM D5185m>20<15WaterWC Method>0.2NEGNEGSiltscalar*VisualNONENONENONEDebrisscalar*VisualNONELIGHTNONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLSodiumppmASTM D5185m2134BoronppmASTM D5185m0<11MalganeseppmASTM D5185m2210ManganeseppmASTM D5185m2097MagnesiumppmASTM D5185m24443528PhosphorusppmASTM D5185m24443528ZincppmASTM D5185m10691176SulfurppmASTM D5185m283728925						-	
PotassiumppmASTM D5185m>20<1	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
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Debrisscalar*VisualNONELIGHTNONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m2134BoronppmASTM D5185m373BariumppmASTM D5185m0<11MolybdenumppmASTM D5185m22100MagnesiumppmASTM D5185m22097CalciumppmASTM D5185m24443528PhosphorusppmASTM D5185m9961176ZincppmASTM D5185m583728925	Water		WC Method	>0.2	NEG	NEG	
Sand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m2134BoronppmASTM D5185m373BariumppmASTM D5185m0<11MolybdenumppmASTM D5185m17<1MagnesiumppmASTM D5185m22910MagnesiumppmASTM D5185m2097PhosphorusppmASTM D5185m211693528ZincppmASTM D5185m9961176ZincppmASTM D5185m83728925	Silt	scalar	*Visual	NONE	NONE	NONE	
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m2134BoronppmASTM D5185m10<11BariumppmASTM D5185m0<11MolybdenumppmASTM D5185m10<11ManganeseppmASTM D5185m2210MagnesiumppmASTM D5185m2097CalciumppmASTM D5185m24443528PhosphorusppmASTM D5185m10691176ZincppmASTM D5185m<883728925	Debris	scalar	*Visual	NONE	LIGHT	NONE	
Odorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m2134BoronppmASTM D5185m373BariumppmASTM D5185m0<11MolybdenumppmASTM D5185m0<12100ManganeseppmASTM D5185m22100MagnesiumppmASTM D5185m2097CalciumppmASTM D5185m24443528PhosphorusppmASTM D5185m9961176ZincppmASTM D5185m10691233SulfurppmASTM D5185m883728925	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Emulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m2134BoronppmASTM D5185m373BariumppmASTM D5185m0<1MolybdenumppmASTM D5185m0<1MagneseppmASTM D5185m2210MagnesiumppmASTM D5185m2097CalciumppmASTM D5185m24443528PhosphorusppmASTM D5185m9961176ZincppmASTM D5185m10691233SulfurppmASTM D5185m8837289255	Appearance	scalar	*Visual	NORML	NORML	NORML	
Sodium ppm ASTM D5185m 21 34 Boron ppm ASTM D5185m 37 3 Barium ppm ASTM D5185m 0 <1 Molybdenum ppm ASTM D5185m 0 <1 Manganese ppm ASTM D5185m 22 10 Magnesium ppm ASTM D5185m 209 7 Calcium ppm ASTM D5185m 2444 3528 Phosphorus ppm ASTM D5185m 996 1176 Zinc ppm ASTM D5185m 8372 8925	Odor	scalar	*Visual	NORML	NORML	NORML	
Boron ppm ASTM D5185m 37 3 Barium ppm ASTM D5185m 0 <1 Molybdenum ppm ASTM D5185m 0 <1 Molybdenum ppm ASTM D5185m 17 <1 Manganese ppm ASTM D5185m 22 10 Magnesium ppm ASTM D5185m 209 7 Calcium ppm ASTM D5185m 2444 3528 Phosphorus ppm ASTM D5185m 996 1176 Zinc ppm ASTM D5185m 1069 1233 Sulfur ppm ASTM D5185m 8372 8925	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Barium ppm ASTM D5185m 0 <1	Sodium	ppm	ASTM D5185m		21	34	
Barium ppm ASTM D5185m 0 <1	Boron		ASTM D5185m		37	3	
Manganese ppm ASTM D5185m 22 10 Magnesium ppm ASTM D5185m 209 7 Calcium ppm ASTM D5185m 2444 3528 Phosphorus ppm ASTM D5185m 996 1176 Zinc ppm ASTM D5185m 1069 1233 Sulfur ppm ASTM D5185m 8372 8925	Barium		ASTM D5185m		0	<1	
Manganese ppm ASTM D5185m 22 10 Magnesium ppm ASTM D5185m 209 7 Calcium ppm ASTM D5185m 2444 3528 Phosphorus ppm ASTM D5185m 996 1176 Zinc ppm ASTM D5185m 1069 1233 Sulfur ppm ASTM D5185m 8372 8925	Molybdenum	ppm	ASTM D5185m		17	<1	
Calcium ppm ASTM D5185m 2444 3528 Phosphorus ppm ASTM D5185m 996 1176 Zinc ppm ASTM D5185m 1069 1233 Sulfur ppm ASTM D5185m 8372 8925			ASTM D5185m		22	10	
Calcium ppm ASTM D5185m 2444 3528 Phosphorus ppm ASTM D5185m 996 1176 Zinc ppm ASTM D5185m 1069 1233 Sulfur ppm ASTM D5185m 8372 8925	Magnesium	ppm	ASTM D5185m		209	7	
Phosphorus ppm ASTM D5185m 996 1176 Zinc ppm ASTM D5185m 1069 1233 Sulfur ppm ASTM D5185m 8372 8925	Calcium		ASTM D5185m		2444	3528	
Zinc ppm ASTM D5185m 1069 1233 Sulfur ppm ASTM D5185m 8372 8925	Phosphorus		ASTM D5185m		996	1176	
Sulfur ppm ASTM D5185m 8372 8925	Zinc		ASTM D5185m		1069	1233	
	Sulfur		ASTM D5185m		8372	8925	
	Visc @ 40°C		ASTM D445		65.0	53.7	

Submitted By: KARRINGTON RENDLEMAN







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