

## WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL



## [702216 RENTAL] Wachine Id VOLVO A30G 753623

Hydraulic System

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

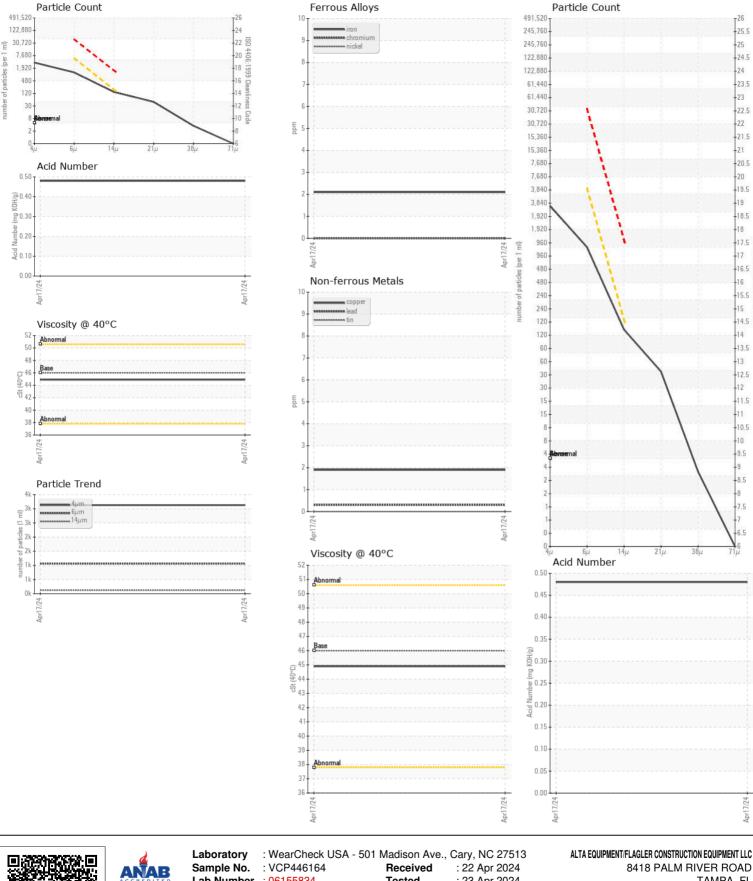
Recommendation         Test Sample Date         U.M.M.         Method Linkity         Current Content Info         History1         History1         History1           Resample at the next service interval to monitor.         Sample Date         Client Info         17 Apr 202             Machine Age fors         Client Info         Not Change         0             Oil Age         hrs         Client Info         Not Change         0             Oil Changed         Client Info         Not Change          Not Change             Sample Status         Normal                MEAD         Component wear rates are normal.         Norkel         pm         ASM 25868         >50         2             Norkel         ppm         ASM 25868         >20         0             Norkel         ppm         ASM 25868         >20         0             Norkel         ppm         ASM 25868         >20         1             Norkel         ppm								
Barnyle Number         Client Info         VCP44516         ····         ····         ····           Sample Number         Sample Number         Client Info         17.49 203         ···         ···           Machine Age         ins         Client Info         0         ····         ····         ····         ···	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age         hrs         Olient Into         7 Parket		Sample Number		Client Info		VCP446164		
Oil Age         hrs         Client Info         0             Filter Changed         Client Info         Not Change             Sample Status         Not Change         Client Info         Not Change            WEAR         Iron         ppm         ASTI D5185n         -SO         2            All component wear rates are normal.         Iron         ppm         ASTI D5185n         -SO         2             Nicke         ppm         ASTI D5185n         -SO         2             All component wear rates are normal.         Iron         ppm         ASTI D5185n         -SO         2             Aluminum         ppm         ASTI D5185n         -SO         2             Aluminum         ppm         ASTI D5185n         -SO         1             Vanadium         ppm         ASTI D5185n         -SO         1             Vanadium         ppm         ASTI D5185n         -SO         2             Vanadium         ppm         AST		Sample Date		Client Info		17 Apr 2024		
Filter Age         Pirs         Client Info         O		Machine Age	hrs	Client Info		749		
Oil Changed Filter Changed Sample Status         Client Into         Not Changed NORMAL         ···         ···           WEAR         Iron         pm         ATU D1956         >50         2         -         -           All component wear rates are normal.         Iron         pm         ATU D1956         >10         0         -         -         -           Nickel         ppm         ASTU D1956         >10         0         -		Oil Age	hrs	Client Info		0		
Filter Changed Sample Status         Clean Info         NotRend NORMA		Filter Age	hrs	Client Info		0		
Sample Status         NORMA		Oil Changed		Client Info		Not Changd		
WEAR         Iron         ppm         ASTM D515m         >50         2             All component wear rates are normal.         ppm         ASTM D515m         >20         0             Nickel         ppm         ASTM D515m         >10         0             Silver         ppm         ASTM D515m         20         0             All component wear rates are normal.         ASTM D515m         20         0             Silver         ppm         ASTM D515m         20         0             Lead         ppm         ASTM D515m         20         0             Tin         ppm         ASTM D515m         20         0             Vaadum         ppm         ASTM D515m         20         0             Vaadum         ppm         ASTM D515m         20         2             Vaadum         ppm         ASTM D515m         20         2             Velow Metal         scalar		Filter Changed		Client Info		Not Changd		
All component wear rates are normal.       Chromium       ppm       ASTM 25186       >20       0           Nickel       ppm       ASTM 25186       0            Silver       ppm       ASTM 25186       20       0           Silver       ppm       ASTM 25186       20       0           Lead       ppm       ASTM 25186       >20       0           Copper       ppm       ASTM 25186       >20       0           Vanadium       ppm       ASTM 25186       >20       2           Vanadium       ppm       ASTM 25186       >20       2		Sample Status				NORMAL		
All component wear rates are normal.       Chromium       ppm       ASTM 05185m       200       0           Nickel       ppm       ASTM 05185m       0           Silver       ppm       ASTM 05185m       0           Silver       ppm       ASTM 05185m       20       0           Silver       ppm       ASTM 05185m       200       0           Lead       ppm       ASTM 05185m       200       0           Usadium       ppm       ASTM 05185m       -200       0								
All component wear rates are normal.       Nickel       ppm       ASTM 0516m       -10           Titanium       ppm       ASTM 0516m       -           All uminum       ppm       ASTM 0516m       -           All uminum       ppm       ASTM 0516m       -20       0           All uminum       ppm       ASTM 0516m       -20       0           Copper       ppm       ASTM 0516m       -20       0           Variadium       ppm       ASTM 0516m       -20       0           Variadium       ppm       ASTM 0516m       -20       0           Variadium       ppm       ASTM 0516m       -20       2           The system cleanliness is acceptable.       paticles salum       ASTM 0516m       >20       2           Paticles salum       ASTM 0516m       -20       1            The system cleanliness is acceptable for your target ISO 4406       Paticles salum       ASTM 07647       -500       1063	WEAR							
Function         ppm         ASTM D5185m         C            Silver         ppm         ASTM D5185m         20             Aluminum         ppm         ASTM D5185m         20             Lead         ppm         ASTM D5185m         >20             Lead         ppm         ASTM D5185m         >20             Vanadium         ppm         ASTM D5185m         >20         0             Vanadium         ppm         ASTM D5185m         >20         0             Vanadium         ppm         ASTM D5185m         >20         2             Value         NoNE          Value         NONE             Value         NoNE          Value         NONE             Value         NoNE          Value         NONE             Paticles >20 m         ASTM D7647         >10         31             Particles >	All component wear rates are normal.							
Silver         pp         ASTM D5180         0            Aluminum         ppm         ASTM D5185         >20         0             Aluminum         ppm         ASTM D5185         >20         0             Copper         ppm         ASTM D5185         >20         0             Vanadium         ppm         ASTM D5185         >20         0					>10	-		
Aluminum         ppm         ASTM D5185m         >20         0             Lead         ppm         ASTM D5185m         >20         <1								
Lead         pp         ASTM DS185n         >20         <1								
Copper         ppm         ASTM D6185m         >150         2								
Tin         ppm         ASTM D5185m         >20         0            Vanadium         ppm         ASTM D5185m         <1								
Vanadium         ppm         ASTM D5185m         <1             White Metal vellow Metal scalar         visual NONE         NONE         NONE             CONTAMINATION         Silicon particles scalar         NONE         NONE         20             The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.         Silicon Particles >4µm         ASTM D5185m         20         2             Particles >4µm         ASTM D7647         500         1063              Particles >4µm         ASTM D7647         500         1063              Particles >4µm         ASTM D7647         10         3              Particles >4µm         ASTM D7647         10         3              Particles >1µm         ASTM D7647         10         3              Particles >21µm         ASTM D7647         10         3              Oil Cleantiness         ISO 4406 (c)         >-10*II			ppm					
White Metal Yellow Metal         scalar         Visual         NONE         NONE			ppm		>20			
Yellow Metal         scalar         *Visual         NONE            CONTAMINATION         Silicon         ppm         ASTM D5185m         >20         2             Potassium         ppm         ASTM D5185m         >20         <1			ppm					
Silicon         ppm         ASTM D5185m         >20         2             Potassium         ppm         ASTM D5185m         >20         <1			scalar			-		
Potassium         ppm         ASTM D518m         >20         <1            Water         WC Method         >0.1         NEG             Water         WC Method         >0.1         NEG             Particles source         ASTM D7647         >5000         1063             Particles source         ASTM D7647         >100         123             Particles source         ASTM D7647         >100         1063             Particles source         ASTM D7647         >100         123             Particles source         ASTM D7647         >100         13             Particles source         ISO 4406 (o)         >-1914         19171/14             Silt         scalar         *Visual         NONE         ILGHT             Silt         scalar         *Visual         NORE         ILGHT             Sand/Dirt         scalar         *Visual         NORE         ILGHT </td <td>Yellow Metal</td> <td>scalar</td> <td>*Visual</td> <td>NONE</td> <th>NONE</th> <td></td> <td></td>		Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium         ppm         ASTM D518m         >20         <1            Water         WC Method         >0.1         NEG             Water         WC Method         >0.1         NEG             Particles source         ASTM D7647         >5000         1063             Particles source         ASTM D7647         >100         123             Particles source         ASTM D7647         >100         1063             Particles source         ASTM D7647         >100         123             Particles source         ASTM D7647         >100         13             Particles source         ISO 4406 (o)         >-1914         19171/14             Silt         scalar         *Visual         NONE         ILGHT             Silt         scalar         *Visual         NORE         ILGHT             Sand/Dirt         scalar         *Visual         NORE         ILGHT </td <td></td> <td>0:11:</td> <td></td> <td></td> <td></td> <th>•</th> <td></td> <td></td>		0:11:				•		
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.       Water       WC Method       >0.1       NEG          Particles >4µm       ASTM D7647       Image: Signed Si	The system cleanliness is acceptable for your target ISO 4406							
cleanliness code. The system and fluid cleanliness is acceptable.       Tricles >4µm       ASTM D7647       S127           Particles >4µm       ASTM D7647       >5000       1063           Particles >4µm       ASTM D7647       >10       32           Particles >4µm       ASTM D7647       >10       3           Particles >4µm       ASTM D7647       >10       3           Particles >4µm       ASTM D7647       >10       3           Particles >4µm       ASTM D7647       >3       0           Particles >50µm       ASTM D7647       >3       0           Particles >71µm       ASTM D7647       >3       0           Silt       scalar       *0/sual       NONE       NONE           Silt       scalar       *0/sual       NONE       NORE           Appearance       scalar       *0/sual       NORHL       NORML       NORML          The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.			ppm					
Particles >4µiii       ASTM D7647       3127           Particles >14µm       ASTM D7647       >5000       1063          Particles >14µm       ASTM D7647       >160       123           Particles >21µm       ASTM D7647       >40       41           Particles >21µm       ASTM D7647       >3       0           Particles >38µm       ASTM D7647       >3       0           Particles >21µm       ASTM D7647       >3       0           OIl Cleanliness       ISO 4406 (c)       >1914       19/1714           Silt       scalar       *Visual       NONE       NONE           Sand Orit       scalar       Visual       NORML       NORML           Sodium       ppm <td></td> <td></td> <td></td> <td>&gt;0.1</td> <th></th> <td></td> <td></td>					>0.1			
Particles >14µm         ASTM D7647         >160         123             Particles >21µm         ASTM D7647         >40         41             Particles >38µm         ASTM D7647         >10         3             Particles >38µm         ISO 4406 (c)         >-//914         19/17/14             Oil Cleanliness         ISO 4406 (c)         >-//914         19/17/14             Silt         scalar         *Visual         NONE         NONE         ISO 4406 (c)         >-//914         19/17/14             Silt         scalar         *Visual         NONE         ISO 4406 (c)         >-//914         ISO 4406 (c)         -//914         ISO 4406 (c)         -//914         ISO 4406 (c)         ISO 4406 (c) <t< td=""><td></td><td></td><td></td><td></td><th></th><td></td><td></td></t<>								
Particles >21µm         ASTM D7647         >40         41             Particles >38µm         ASTM D7647         >10         3             Particles >37µm         ASTM D7647         >3         0             Particles >71µm         ASTM D7647         >3         0             Oil Cleanliness         Iso 4406 (c)         >-/191/4         191/71/4             Silt         scalar         *Visual         NONE         NONE             Debris         scalar         *Visual         NONE         LIGHT             Sand/Dirt         scalar         *Visual         NORE         NONE             Sand/Dirt         scalar         *Visual         NOR         NORM             Appearance         scalar         *Visual         NORM         NORM             Boron         ppm         ASTM D5185m         0.0         0             Molybdenum         pm         ASTM D5185m         0.0         0								
Particles >88µm         ASTM D7647         >10         3            Particles >71µm         ASTM D7647         >3         0            Oil Cleanliness         ISO 4406 (c)         >-/19/4         19/17/14             Silt         scalar         *Visual         NONE         NONE         ILGHT            Silt         scalar         *Visual         NONE         LIGHT             Sand/Dirt         scalar         *Visual         NONE         LIGHT             Appearance         scalar         *Visual         NORML         NORML             Odor         scalar         *Visual         NORML         NORML             Odor         scalar         *Visual         NORML         NORML             Odor         scalar         *Visual         NORML         NORML             The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.         Sodium         pm         ASTM D5185m         1.4         0            Manganese								
Particles >71µm         ASTM D7647         >3         0            Oil Cleanliness         ISO 4406 (c)         >-/19/14         19/17/14             Silt         scalar         *Visual         NONE         NONE             Debris         scalar         *Visual         NONE         LIGHT             Sand/Dirt         scalar         *Visual         NONE         NORM             Appearance         scalar         *Visual         NORM         NORM             Odor         scalar         *Visual         NORM         NORM             Bronn         ppm         ASTM D5185m         14         0             Molybdenum         ppm         ASTM D5185m         0.								
Oil CleanlinessISO 4406 (c)/19/1419/17/14Siltscalar*VisualNONENONEDebrisscalar*VisualNONELIGHTSand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGSodiumppmASTM D5185m140BoronppmASTM D5185m0.00BariumppmASTM D5185m0.00MarganeseppmASTM D5185m0.00MarganeseppmASTM D5185m0.00PhosphorusppmASTM D5185m96ZincppmASTM D5185m554325SulfurppmASTM D5185m37191906								
Siltscalar*VisualNONENONEDebrisscalar*VisualNONELIGHTSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*VisualNORMLNORMLBoronppmASTM D5185m140BariumppmASTM D5185m0.00MolybdenumppmASTM D5185m0.00ManganeseppmASTM D5185m0.00ManganeseppmASTM D5185m0.00ManganeseppmASTM D5185m4.9966PhosphorusppmASTM D5185m4.94.37SulfurppmASTM D5185m4.94.37SulfurppmASTM D5185m4.194.37SulfurppmASTM D5185m3.711906SulfurppmASTM D5185m3.711906SulfurppmASTM D5185m3.711906SulfurppmASTM D5185m3.711906 <t< td=""><td></td><td></td><td></td><td></td><th>-</th><td></td><td></td></t<>						-		
Debrisscalar*VisualNONELIGHTSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLDdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGBoronppmASTM D5185m140BariumppmASTM D5185m0.00MolybdenumppmASTM D5185m0.00MaganeseppmASTM D5185m0.00MaganeseppmASTM D5185m0.00MaganeseppmASTM D5185m0.00MaganeseppmASTM D5185m0.00MagnesiumppmASTM D5185m4.996.6PhosphorusppmASTM D5185m35.4325ZincppmASTM D5185m37.19100.6SulfurppmASTM D5185m37.19100.6								
Sand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*VisualNORMLNORMLFLUID CONDITIONSodiumppmASTM D5185m140BoronppmASTM D5185m140BariumppmASTM D5185m0.00MolybdenumppmASTM D5185m0.00MarganeseppmASTM D5185m0.00MarganesumppmASTM D5185m2.6<1						-		
Appearance Odorscalar*VisualNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGFLUID CONDITIONSodiumppmASTM D5185m1400BoronppmASTM D5185m1400BariumppmASTM D5185m0.000MolybdenumppmASTM D5185m0.000ManganeseppmASTM D5185m0.000MagnesiumppmASTM D5185m0.000ManganeseppmASTM D5185m2.6<-1								
Odorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEGFLUID CONDITIONSodiumppmASTM D5185m140BoronppmASTM D5185m140BariumppmASTM D5185m0.00MolybdenumppmASTM D5185m0.00ManganeseppmASTM D5185m0.00MagnesiumppmASTM D5185m0.00MagnesiumppmASTM D5185m2.6<1								
Emulsified Waterscalar*Visual>0.1NEGFLUID CONDITIONThe AN level is acceptable for this fluid. The condition of the oil is suitable for further service.SodiumppmASTM D5185m140BoronppmASTM D5185m0.00BariumppmASTM D5185m0.00MolybdenumppmASTM D5185m0.00ManganeseppmASTM D5185m0.00MagnesiumppmASTM D5185m2.6<1						-		
FLUID CONDITIONSodiumppmASTM D5185m0BoronppmASTM D5185m140BariumppmASTM D5185m0.00MolybdenumppmASTM D5185m0.00ManganeseppmASTM D5185m0.00MagnesiumppmASTM D5185m2.6<1								
BoronppmASTM D5185m140BariumppmASTM D5185m0.00BariumppmASTM D5185m0.00MolybdenumppmASTM D5185m0.00ManganeseppmASTM D5185m0.00MagnesiumppmASTM D5185m2.6<1		Emulsified water	scalar	" visuai	>0.1	NEG		
BoronppmASTM D5185m140BariumppmASTM D5185m0.00BariumppmASTM D5185m0.00MolybdenumppmASTM D5185m0.00ManganeseppmASTM D5185m0.00MagnesiumppmASTM D5185m2.6<1		Sodium	nnm	ASTM D5185m		0		
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.       Barium       ppm       ASTM D5185m       0.0       0           Molybdenum       ppm       ASTM D5185m       0.0       0           Manganese       ppm       ASTM D5185m       0.0       0           Magnesium       ppm       ASTM D5185m       0.0       0           Calcium       ppm       ASTM D5185m       2.6       <1					14	-		
Suitable for further service.       Molybdenum       ppm       ASTM D5185m       0.0       0           Manganese       ppm       ASTM D5185m       0.0       0           Magnesium       ppm       ASTM D5185m       0.0       0           Calcium       ppm       ASTM D5185m       2.6       <1	•							
Manganese       ppm       ASTM D5185m       0.0       0           Magnesium       ppm       ASTM D5185m       2.6       <1           Calcium       ppm       ASTM D5185m       4.9       96           Phosphorus       ppm       ASTM D5185m       35.4       32.5           Zinc       ppm       ASTM D5185m       41.9       43.7           Sulfur       ppm       ASTM D5185m       37.19       1906								
Magnesium       ppm       ASTM D5185m       2.6       <1           Calcium       ppm       ASTM D5185m       49       96           Phosphorus       ppm       ASTM D5185m       354       325           Zinc       ppm       ASTM D5185m       419       437           Sulfur       ppm       ASTM D5185m       3719       1906								
Calcium       ppm       ASTM D5185m       49       96           Phosphorus       ppm       ASTM D5185m       354       325           Zinc       ppm       ASTM D5185m       419       437           Sulfur       ppm       ASTM D5185m       3719       1906		-						
Phosphorus         ppm         ASTM D5185m         354         325             Zinc         ppm         ASTM D5185m         419         437             Sulfur         ppm         ASTM D5185m         3719         1906		•						
Zinc         ppm         ASTM D5185m         419         437             Sulfur         ppm         ASTM D5185m         3719         1906								
Sulfur         ppm         ASTM D5185m         3719         1906								
		Sulfur Acid Number (AN)			3/19	1906		

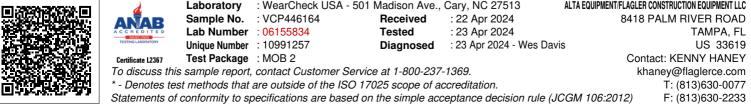
Acid Number (AN) mg KOH/g ASTM D8045

Visc @ 40°C cSt ASTM D445 46

0.48

44.9





Contact/Location: KENNY HANEY - VOLVO0093