

WEAR CONTAMINATION FLUID CONDITION

NORMAL

ABNORMAL

NORMAL

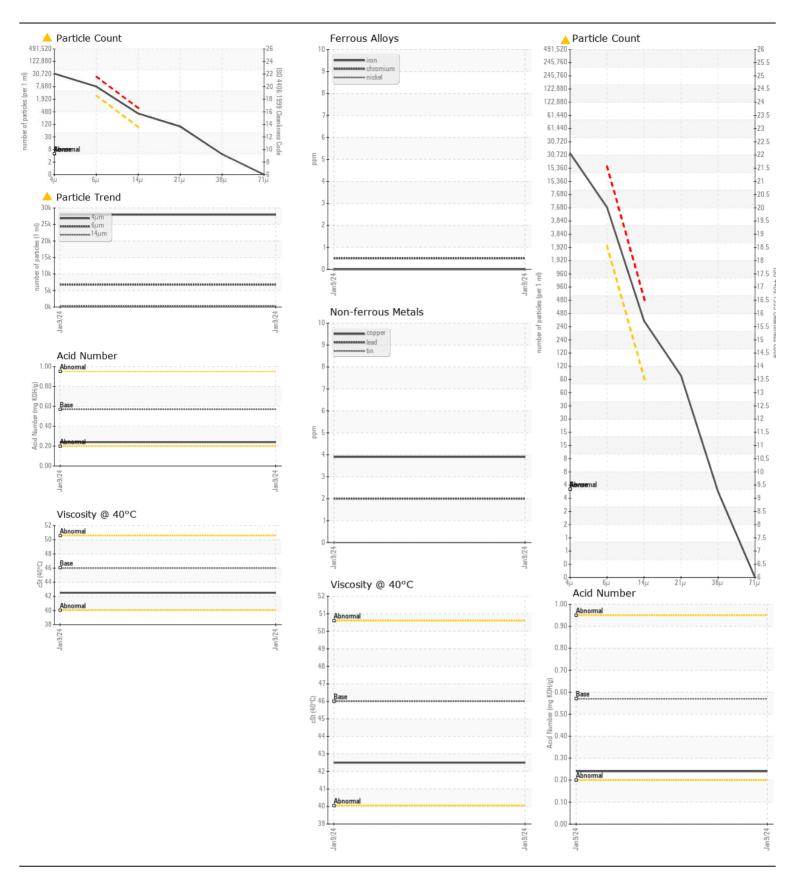


Area [SW1028546 LKQ]
Machine Id VOLVO L90H 624586

Component Hydraulic System

AW HYDRAULIC OIL ISO 46 (--- GAL)

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.   Oil and filter change at the next service interval to monitor.   Oil Age	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.   Assumption is recommended at this time. Resample at the next service interval to monitor.   Assumption is recommended at this time. Resample at the next service interval to monitor.   Assumption is recommended at this time. Resample at the next service interval to monitor.   Assumption is recommended at this time. Resample at the next service interval to monitor.   Assumption is recommended at this time. Resample at the next service interval to monitor.   Assumption is recommended at this time. Resample at the next service interval to monitor.   Assumption is recommended at this time. Resample at the next service interval to monitor.   Assumption is recommended at this time. Resample at the next service interval to monitor.   Assumption is recommended at this time. Resample at the next service interval to monitor.   Assumption is recommended at this time. Resample at the next service interval to monitor.   Assumption is recommended.   Ass	Oil and filter change at the time of sampling has been noted. No		OOW		LIIII07 (OII		-	
Machine Age   Inter   Client Info   972								
O    Age   hrs   Client Info   0			hre					
Filter Age   hrs   Client Info   Changed   Changed   Client Info   Changed   Cha	service interval to monitor.							
Oil Changed   Cilent Info   Changed   ABNORMAL   Changed   Cilent Info   Changed   ABNORMAL   Changed   Cha		_						
Filter Changed   Sample Status   Sample Stat			1110			-		
Name		_						
Iron				Oliciti IIIIo		_		
All component wear rates are normal.    Chromium   ppm   ASTM 05885m   > 20								
All component wear rates are normal.    Chromium   ppm   ASTM 05885m   > 20	WEAR	Iron	ppm	ASTM D5185m	>50	0		
Titanium   ppm   ASTM Disists   0		Chromium	ppm	ASTM D5185m	>20	<1		
Silver   ppm   ASTM D5185m   > 20   <1	All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>10	0		
Aluminum   ppm   ASTM D586sm   >20   2		Titanium	ppm	ASTM D5185m		0		
Lead		Silver	ppm	ASTM D5185m		0		
Copper   ppm   ASTM D5185m   >15.0   4		Aluminum	ppm	ASTM D5185m	>20	<1		
Tinandium   ppm   ASTM D5185m   >20		Lead	ppm	ASTM D5185m	>20	2		
Vanadium   ppm   ASTM D5185m   NONE   NONE		Copper	ppm	ASTM D5185m	>150	4		
White Metal   Scalar   Visual   NONE   NO		Tin	ppm	ASTM D5185m	>20	0		
Vallow Metal   Scalar   Visual   NONE   N		Vanadium	ppm	ASTM D5185m		0		
Silicon   ppm   ASTM D5185m   >20   4         Potassium   ppm   ASTM D5185m   >20   0       Water   WC Method   >0.1   NEG       Particles >4µm   ASTM D7647   >2500   6785       Particles >14µm   ASTM D7647   >2500   6785       Particles >38µm   ASTM D7647   >20   4       Particles >38µm   ASTM D7647   >20   6785       Particles >38µm   ASTM D7647   >4   4       Particles >38µm   ASTM D7647   >4   4   4       Particles >38µm   ASTM D7647   >4   4   4       Particles >38µm   ASTM D7647   >3   0       Oil Cleanliness   Silt   Scalar   Visual   NONE   NONE     Sand/Dirt   Scalar   Visual   NONE   NONE       Appearance   Scalar   Visual   NONE   NONE       Appearance   Scalar   Visual   NONE   NONE       Appearance   Scalar   Visual   NONE   NORML       Appearance   Scalar   Visual   NORML   NORML       Emulsified Water   Scalar   StM D5185m   5   0       ASTM D5185m   5   0         ASTM D5185m   5   0		White Metal	scalar	*Visual	NONE	NONE		
Potassium   ppm   ASTM D5185m   ≥20   0		Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium   ppm   ASTM D5185m   ≥20   0								
Water   WC Method   So.1   NEG   So.2   NEG   So.2   NEG   So.3   NEG   NEG   So.3   NEG   So	CONTAMINATION							
Particles >4μm   ASTM D7647   27941	There is a high amount of particulates present in the oil		ppm					
Particles >6µm   ASTM D7647   >2500   A 6785         Particles >14µm   ASTM D7647   >80   A 348         Particles >22µm   ASTM D7647   >20   A 83         Particles >28µm   ASTM D7647   >4   4         Particles >71µm   ASTM D7647   >3   0       Oil Cleanliness   ISO 4406 (c)           Silt   scalar   *Visual   NONE   NONE         Sand/Dirt   scalar   *Visual   NONE   NONE         Sand/Dirt   scalar   *Visual   NONE   NONE         ASTM D7647   >3   0         Oil Cleanliness   ISO 4406 (c)           Silt   scalar   *Visual   NONE   NONE         Sand/Dirt   scalar   *Visual   NONE   NONE         Appearance   scalar   *Visual   NORML   NORML   NORML   NORML   NORML   NORML   NORML   NORML       Odor   scalar   *Visual   NORML   NORML   NORML   NORML   NORML   NORML       Emulsified Water   scalar   *Visual   NORML   NORML   NORML       Emulsified Water   scalar   *Visual   NORML   NORML   NORML       Dirticles >200   Sandar   *Visual   NORML   NORML     NEG       The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.    Particles >21µm   ppm   ASTM D5185m   5   0         Manganese   ppm   ASTM D5185m   5   0         Manganese   ppm   ASTM D5185m   25   <1         Calcium   ppm   ASTM D5185m   25   <1         Calcium   ppm   ASTM D5185m   25   <1         Calcium   ppm   ASTM D5185m   300   325         Zinc   ppm   ASTM D5185m   2500   4661         Acid Number (AN)   mg KOHlg   ASTM D8045   0.57   0.24	Thore is a riight amount of particulates present in the oil.				>0.1			
Particles >14μm   ASTM D7647 >80					0.000			
Particles >21µm   ASTM D7647   >20		•						
Particles > 38 \( \text{pm} \)   ASTM D7647   >4   4         Particles > 71 \( \text{pm} \)   ASTM D7647   >3   0       Oil Cleanliness   ISO 4406 (c)   >-/18/13   \( \text{ \rm 22/20/16} \)       Silt   Socalar   *Visual   NONE   NONE       Debris   Scalar   *Visual   NONE   NONE   NONE       Debris   Scalar   *Visual   NONE   NONE   NONE       Sand/Dirt   Scalar   *Visual   NORML								
Particles >71 μm								
Oil Cleanliness   ISO 4406 (c)   >-/18/13   A 22/20/16		•						
Silt   Scalar   Visual   NONE   NORML   NO						-		
Debris   Scalar   *Visual   NONE   NORML								
Sand/Dirt   Scalar   *Visual   NONE   NONE       NONE   Appearance   Scalar   *Visual   NORML   NORM								
Appearance   Scalar   *Visual   NORML   NORML   NORML   Emulsified Water   Scalar   *Visual   NORML   NORML   NORML   NORML   Emulsified Water   Scalar   *Visual   NORML								
Codor   Scalar   *Visual   NORML   N								
Emulsified Water   scalar   *Visual   >0.1   NEG								
Sodium   ppm   ASTM D5185m   5   0								
Boron   ppm   ASTM D5185m   5   0				Visuai				
Boron   ppm   ASTM D5185m   5   0	FLUID CONDITION	Sodium	ppm	ASTM D5185m		1		
Barium   ppm   ASTM D5185m   5   0         Molybdenum   ppm   ASTM D5185m   5   0         Magnesium   ppm   ASTM D5185m   5   0         Magnesium   ppm   ASTM D5185m   5   0         Magnesium   ppm   ASTM D5185m   25   <1         Calcium   ppm   ASTM D5185m   200   57         Phosphorus   ppm   ASTM D5185m   300   325         Zinc   ppm   ASTM D5185m   370   418         Sulfur   ppm   ASTM D5185m   2500   4561         Acid Number (AN)   mg KOH/g   ASTM D8045   0.57   0.24		Boron	ppm	ASTM D5185m	5	0		
Manganese ppm ASTM D5185m	·	Barium		ASTM D5185m	5	0		
Magnesium         ppm         ASTM D5185m         25         <1	acceptable for the time in service.	Molybdenum	ppm	ASTM D5185m	5	0		
Calcium         ppm         ASTM D5185m         200         57             Phosphorus         ppm         ASTM D5185m         300         325             Zinc         ppm         ASTM D5185m         370         418             Sulfur         ppm         ASTM D5185m         2500         4561             Acid Number (AN)         mg KOH/g         ASTM D8045         0.57         0.24		Manganese	ppm	ASTM D5185m		<1		
Calcium         ppm         ASTM D5185m         200         57             Phosphorus         ppm         ASTM D5185m         300         325             Zinc         ppm         ASTM D5185m         370         418             Sulfur         ppm         ASTM D5185m         2500         4561             Acid Number (AN)         mg KOH/g         ASTM D8045         0.57         0.24		_		ASTM D5185m	25	<1		
Phosphorus         ppm         ASTM D5185m         300         325             Zinc         ppm         ASTM D5185m         370         418             Sulfur         ppm         ASTM D5185m         2500         4561             Acid Number (AN)         mg KOH/g         ASTM D8045         0.57         0.24		Calcium						
Sulfur         ppm         ASTM D5185m         2500         4561             Acid Number (AN)         mg KOH/g         ASTM D8045         0.57         0.24		Phosphorus	ppm	ASTM D5185m	300	325		
Acid Number (AN) mg KOH/g ASTM D8045 0.57 0.24		•		ASTM D5185m	370	418		
( ,		Sulfur	ppm	ASTM D5185m	2500	4561		
Visc @ 40°C   cSt   ASTM D445   46   42.5		Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.24		
		Visc @ 40°C	cSt	ASTM D445	46	42.5		





Certificate L2367

Laboratory Sample No. Lab Number

**Unique Number** 

: VCP412918 : 06065534 : 10836916 Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 19 Jan 2024 Diagnosed : 23 Jan 2024

: Don Baldridge Diagnostician

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)

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