WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL



VOLVO A40G 752070

Component Diesel Engine

Test	 	VCP429574 11 Dec 2023 511 0	Limit/Abn	Client Info Client Info	UOM	Sample Number	
Sample Number Client Info VCP429574	 	VCP429574 11 Dec 2023 511 0		Client Info Client Info	OOW	Sample Number	
Sample Date Sample Date Machine Age hrs Client Info Stit Site Page P	 	11 Dec 2023 511 0 0		Client Info			
and viscosity of the oil on your next sample. Machine Age	 	511 0 0					Oil and filter change at the time of sampling has been noted. Resample
Oil Age hrs Client Info 0 Filter Age hrs Client Info 0 Oil Changed Client Info Changed	 	0			hrs		1 7 11 1
Filter Age hrs Client Info Changed Changed Client Info Changed Changed Client Info Changed Changed Changed Changed Changed Client Info Changed C	 	0				•	and viscosity of the oil on your next sample.
Oil Changed Client Info Changed Client Info Changed Client Info Changed Changed Client Info Changed Changed Client Info Changed	 	-					
Filter Changed Sample Status	 	Changeu			1113		
VEAR	 	Changed					
Iron	 	_		Olletti IIIIO			
Chromium ppm ASTM D5185m >20 0 Nickel ppm ASTM D5185m >2 2 2 Titanium ppm ASTM D5185m >2 2 2 Titanium ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >2 2 Aluminum ppm ASTM D5185m >40 <1 Copper ppm ASTM D5185m >330 279 Tin ppm ASTM D5185m >15 3 Vanadium ppm ASTM D5185m >15 3 Vanadium ppm ASTM D5185m >15 3 Vanadium ppm ASTM D5185m >0 Valued Scalar *Visual NONE NONE Valued NONE NONE Fuel % ASTM D5185m >2 29 Valuer WC Method >0.2 NEG Water WC Method >0.2 NEG Glycol WC Method NEG Soot % % *ASTM D7844 >3 0.2	 	NONWAL					
Chromium ppm ASTM D5185m >20 0 Nickel ppm ASTM D5185m >2 2 2 Titanium ppm ASTM D5185m >2 2 2 Titanium ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >2 2 Aluminum ppm ASTM D5185m >40 <1 Copper ppm ASTM D5185m >330 279 Tin ppm ASTM D5185m >15 3 Vanadium ppm ASTM D5185m >15 3 Vanadium ppm ASTM D5185m >15 3 Vanadium ppm ASTM D5185m >0 Valued Scalar *Visual NONE NONE Valued NONE NONE Fuel % ASTM D5185m >2 29 Valuer WC Method >0.2 NEG Water WC Method >0.2 NEG Glycol WC Method NEG Soot % % *ASTM D7844 >3 0.2	 	15	>100	ASTM D5185m	ppm	Iron	WEAR
Nickel ppm ASTM D5185m >2 2 Titanium ppm ASTM D5185m >2 0 Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >2 2 Copper ppm ASTM D5185m >3 279 Tin ppm ASTM D5185m >15 3 Vanadium ppm ASTM D5185m >15 3 Vanadium ppm ASTM D5185m >15 3 Value White Metal scalar *Visual NONE NONE Fuel content negligible. There is no indication of any contamination in the oil. Silicon ppm ASTM D5185m >25 29 Fuel % ASTM D3524 >6.0 0.7 Water WC Method >0.2 NEG Glycol WC Method NEG Soot % % *ASTM D7844 >3 0.2	 	0	>20	ASTM D5185m	ppm	Chromium	
Titanium ppm ASTM D5185m <1 Silver ppm ASTM D5185m >2 0 Aluminum ppm ASTM D5185m >25 2 Lead ppm ASTM D5185m >40 <1 Copper ppm ASTM D5185m >330 279 Tin ppm ASTM D5185m >15 3 Vanadium ppm ASTM D5185m >15 3 Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Fuel content negligible. There is no indication of any contamination in the oil. Silicon ppm ASTM D5185m >25 29 Fuel % ASTM D5185m >20 7 Fuel % ASTM D5185m >20 7 Water WC Method >0.2 NEG Glycol WC Method NEG Soot % *ASTM D7844 >3 0.2	 	2	>2	ASTM D5185m		Nickel	letal levels are typical for a new component breaking in.
Silver	 	<1		ASTM D5185m		Titanium	
Aluminum ppm ASTM D5185m >25 2	 	0	>2	ASTM D5185m		Silver	
Lead ppm ASTM D5185m >40 <1 Copper ppm ASTM D5185m >330 279 Tin ppm ASTM D5185m >15 3 Vanadium ppm ASTM D5185m >15 3 White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Potassium ppm ASTM D5185m >25 29 Fuel % ASTM D5185m >20 7 Fuel % ASTM D3524 >6.0 0.7 Water WC Method >0.2 NEG Glycol WC Method NEG Soot % % *ASTM D7844 >3 0.2	 	2	>25	ASTM D5185m		Aluminum	
Copper							
Tin	 						
Vanadium ppm ASTM D5185m 0							
White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Your Potassium ppm ASTM D5185m >25 29 Fuel % ASTM D3185m >20 7 Fuel % ASTM D3524 >6.0 0.7 Water WC Method >0.2 NEG Glycol WC Method NEG Soot % % *ASTM D7844 >3 0.2	 						
Yellow Metal scalar *Visual NONE CONTAMINATION Silicon ppm ASTM D5185m >25 29 Fuel content negligible. There is no indication of any contamination in the oil. Fuel % ASTM D5185m >20 7 Water WC Method >0.2 NEG Glycol WC Method NEG Soot % % ASTM D7844 >3 0.2	 	-	NONE				
CONTAMINATION Fuel content negligible. There is no indication of any contamination in the oil. Silicon ppm ASTM D5185m > 25 Potassium ppm ASTM D5185m > 20 Potassium ppm ASTM D3524 > 6.0 Potassium ppm ASTM D3524 > 6.0 Potassium ppm ASTM D3524 > 6.0 Potassium ppm ASTM D3524 Potassium ppm Ppm ASTM D3524 Potassium ppm ASTM D3524 Potassium ppm Pp	 						
Potassium ppm ASTM D5185m >20 7	 						
Potassium ppm ASTM D5185m >20 7	 	29	>25	ASTM D5185m	ppm	Silicon	CONTAMINATION
the oil. Water WC Method >0.2 NEG Glycol WC Method NEG Soot % *ASTM D7844 >3 0.2	 	7	>20	ASTM D5185m	ppm	Potassium	
Water WC Method >0.2 NEG Glycol WC Method NEG Soot % *ASTM D7844 >3 0.2	 	0.7	>6.0	ASTM D3524	%	Fuel	
Soot % % *ASTM D7844 >3 0.2	 	NEG	>0.2	WC Method		Water	trie oii.
	 	NEG		WC Method		Glycol	
Nitration Abs/cm *ASTM D7624 >20 10.2	 	0.2	>3	*ASTM D7844	%	Soot %	
	 	10.2	>20	*ASTM D7624	Abs/cm	Nitration	
Sulfation Abs/.1mm *ASTM D7415 >30 19.3	 	19.3	>30	*ASTM D7415	Abs/.1mm	Sulfation	
Silt scalar *Visual NONE NONE	 	NONE	NONE	*Visual	scalar	Silt	
Debris scalar *Visual NONE NONE	 	NONE	NONE	*Visual	scalar	Debris	
Sand/Dirt scalar *Visual NONE NONE	 	NONE	NONE	*Visual	scalar	Sand/Dirt	
Appearance scalar *Visual NORML NORML	 	NORML	NORML	*Visual	scalar	Appearance	
Odor scalar *Visual NORML NORML	 	NORML	NORML	*Visual	scalar	Odor	
Emulsified Water scalar *Visual >0.2 NEG	 	NEG	>0.2	*Visual	scalar	Emulsified Water	
ELUD CONDITION	 						
FLUID CONDITION Sodium ppm ASTM D5185m 0	 				ppm		FLUID CONDITION
The BN result indicates that there is suitable alkalinity remaining in the	 						The RN result indicates that there is suitable alkalinity remaining in the
oil. The condition of the oil is acceptable for the time in service.	 						, ,
Molybaenum ppm ASIM DS185m 84					ppm	•	
Manganese ppm ASTM D5185m 2	 				ppm		
Magnesium ppm ASTM D5185m 24						•	
Calcium ppm ASTM D5185m 2157	 						
Phosphorus ppm ASTM D5185m 1011	 	1011				•	
	 	1129		ASTM D5185m	ppm		
Oxidation	 	4156					
	 	4156 14.1	>25				
Base Number (BN) mg KOH/g ASTM D2896 5.5 Visc @ 100°C cSt ASTM D445 10.9	 	4156 14.1 5.5	>25	ASTM D2896	mg KOH/g	Base Number (BN)	







Laboratory Sample No.

Lab Number : 06083335 Unique Number : 10870780

: VCP429574

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested**

: 08 Feb 2024 Diagnosed

: 09 Feb 2024

: 09 Feb 2024 - Don Baldridge Test Package: MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

TAMPA, FL US 33619 Contact: ROBERT TURNER rturner@ripatampa.com

RIPA AND ASSOCIATES

10149 FISHER AVENUE

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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