WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

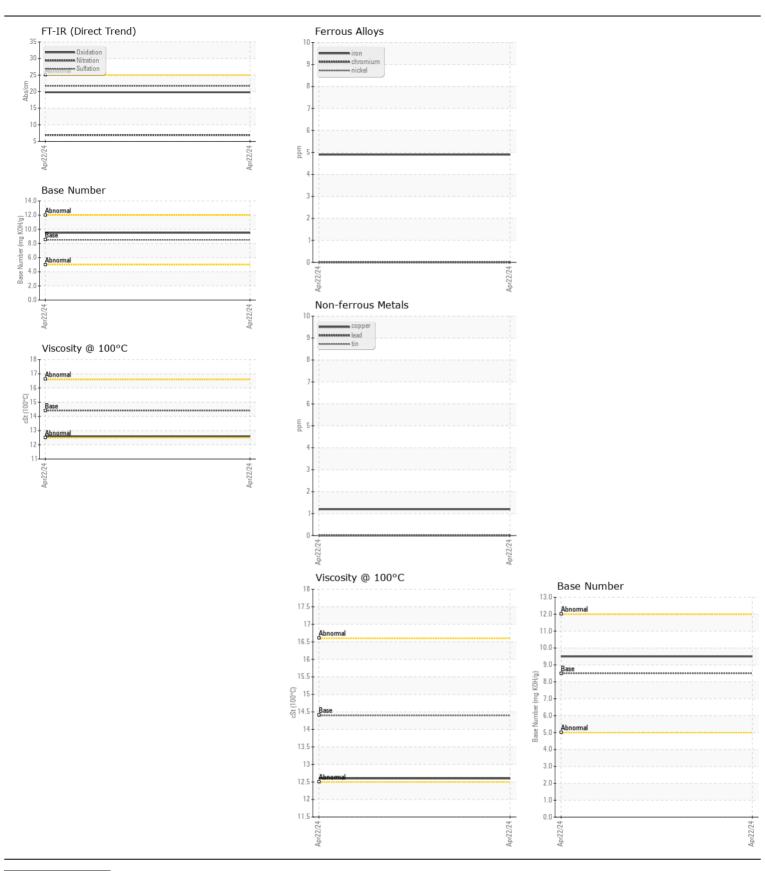


VOLVO A30G 340072

Diesel Engine

DIESEL ENGINE OIL SAE 40 (--- GAL)

Test U.O.M Method United Uni	DILOLL LITAINL OIL OAL 40 (GAL)						
Resample at the next service interval to monitor. Sample Date Client Info Sample Date Client Info Sample Date Client Info 11356	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.		Sample Number		Client Info				
Oil Age		Sample Date		Client Info		22 Apr 2024		
Filter Age		Machine Age	hrs	Client Info		11356		
Colic Changed Cilent Info N/A		Oil Age	hrs	Client Info		11356		
Filter Changed Client Info N/A		•	hrs	Client Info		0		
Nome		Oil Changed		Client Info		N/A		
Iron		Filter Changed		Client Info		N/A		
All component wear rates are normal.		Sample Status				NORMAL		
All component wear rates are normal.	WEAD	lvan		ACTM DE10Em	. 100	_		
Nickel ppm ASTM D5185m 22 0								
Titanium ppm ASTM 05185m 20 0								
Silver					>2			
Aluminum ppm ASTM D6185m >25 0 Lead ppm ASTM D6185m >30 1 Copper ppm ASTM D6185m >30 1 Copper ppm ASTM D6185m >30 1 Tin ppm ASTM D6185m >30 1 Wilson ppm ASTM D6185m >30 1 Wilson ppm ASTM D6185m >5 0 Wilson ppm ASTM D6185m >5 3 WC Method Social WC M					~2			
Lead ppm ASTM D5185m 3-40 0								
Copper								
Tin								
Vanadium								
White Metal Scalar *Visual NONE NO		Vanadium						
Silicon ppm ASTM D5185m >25 3		White Metal			NONE	NONE		
Potassium ppm ASTM D5185m >20 0		Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium ppm ASTM D5185m >20 0								
Fuel WC Method >0.0 <1.0	CONTAMINATION		ppm					
Water WC Method S0.0 NEG	There is no indication of any contamination in the oil.		ppm					
Glycol Soot % % 'ASTM D7844 3 0.3 Soot % % 'ASTM D7824 >20 6.9 Sulfation Abs/cm 'ASTM D7824 >20 6.9 Sulfation Abs/stm 'ASTM D7845 >30 21.7 Silt scalar "Visual NONE NONE NONE Debris scalar "Visual NONE NONE NONE Debris scalar "Visual NORML NORML NORML NORML Appearance scalar "Visual NORML NORML NORML Codor scalar "Visual NORML NORML NORML Emulsified Water scalar "Visual NORML NORML Emulsified Water scalar "Visual NORML NORML The BN result indicates that there is suitable alkalinity remaining in the oil. It is acceptable for the time in service. Boron ppm ASTM D5185m 250 47 Barium ppm ASTM D5185m 10 0 Molybdenum ppm ASTM D5185m 10 0 Magnanese ppm ASTM D5185m 450 513 Calcium ppm ASTM D5185m 450 513 Calcium ppm ASTM D5185m 450 3003 1868								
Soot %					>0.2			
Nitration Abs/cm *ASTM D7624 >20 6.9		•			-			
Sulfation Abs/.lmm *ASTM D7415 >30 21.7 Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML Appearance scalar *Visual NORML NORML NORML NORML Codor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual NORML N								
Silt Scalar *Visual NONE NONE NONE NONE NONE NONE NONE Sand/Dirt Scalar *Visual NONE NORML								
Debris Scalar *Visual NONE NONE Sand/Dirt Scalar *Visual NORML NORML NORML NOR								
Sand/Dirt Scalar *Visual NONE NONE NONE Appearance Scalar *Visual NORML NORM								
Appearance Scalar *Visual NORML NORML NORML Emulsified Water Scalar *Visual NORML NORML Emulsified Water Scalar *Visual NORML NORML NORML NORML Emulsified Water Scalar *Visual NORML NO								
Calcium Calc								
Emulsified Water scalar *Visual >0.2 NEG								
Sodium ppm ASTM D5185m >216 2								
Boron ppm ASTM D5185m 250 47								
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service. Barium ppm ASTM D5185m 10 46 Manganese ppm ASTM D5185m 100 46 Magnesium ppm ASTM D5185m 450 513 Calcium ppm ASTM D5185m 3000 1868 Calcium ppm ASTM D5185m 1150 821 Zinc ppm ASTM D5185m 1350 962 Sulfur ppm ASTM D5185m 4250 3083 Oxidation Abs/.1mm *ASTM D7414 >25 19.8 Base Number (BN) mg KOH/g ASTM D2896 8.5 9.5	FLUID CONDITION		ppm			2		
oil. The condition of the oil is acceptable for the time in service. Molybdenum ppm ASTM D5185m 100 46 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 450 513 Calcium ppm ASTM D5185m 3000 1868 Phosphorus ppm ASTM D5185m 1150 821 Zinc ppm ASTM D5185m 1350 962 Sulfur ppm ASTM D5185m 4250 3083 Oxidation Abs/.1mm *ASTM D7414 >25 19.8 Base Number (BN) mg KOH/g ASTM D2896 8.5 9.5	The RN result indicates that there is suitable alkalinity remaining in the		ppm					
Molybdenum ppm ASIM D5185m 100 46 Magnesium ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 450 513 Calcium ppm ASTM D5185m 3000 1868 Phosphorus ppm ASTM D5185m 1150 821 Zinc ppm ASTM D5185m 1350 962 Sulfur ppm ASTM D5185m 4250 3083 Oxidation Abs/.1mm *ASTM D7414 >25 19.8 Base Number (BN) mg KOH/g ASTM D2896 8.5 9.5	,							
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Calcium ppm ASTM D5185m 3000 1868 Phosphorus ppm ASTM D5185m 1150 821 Zinc ppm ASTM D5185m 1350 962 Sulfur ppm ASTM D5185m 4250 3083 Oxidation Abs/.1mm *ASTM D7414 >25 19.8 Base Number (BN) mg KOH/g ASTM D2896 8.5 9.5								
Phosphorus ppm ASTM D5185m 1150 821 Zinc ppm ASTM D5185m 1350 962 Sulfur ppm ASTM D5185m 4250 3083 Oxidation Abs/.1mm *ASTM D7414 >25 19.8 Base Number (BN) mg KOH/g ASTM D2896 8.5 9.5		•						
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Base Number (BN) mg KOH/g ASTM D2896 8.5 9.5								
VISC @ 100°C CSt AS1M D445 14.4 12.6								
		visc @ 100°C	COL	A5 I IVI D445	14.4	12.6		





Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : ML0000982

Lab Number : 06158724 Unique Number : 10994147

Diagnosed Test Package : CONST (Additional Tests: TBN)

Received

Tested

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.

: 25 Apr 2024 : 25 Apr 2024 - Sean Felton

: 24 Apr 2024

CHANTILLY, VA US 20153 Contact: SERVICE MANAGER

jimmy_elswick@wahazel.com T: (703)378-8300

WILLIAM HAZEL

PO BOX 600

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: