WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Area

[717692]

**VOLVO L70H 624655** 

Diesel Engine

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

Test	VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 ( GAL)								
Resample at the next service interval to monitor.	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	Historv2	
Sample Date   Collent Info   22 Jun 2024								-	
Machine Age   hrs   Cilent Info   500	Resample at the next service interval to monitor.	Sample Date							
Filter Age   Pist   Client Info   Changed   Client Info   Changed   Changed   Client Info   Changed   Changed   Client Info   Changed   Changed			hrs	Client Info		4142			
Cilchanged   Cilcher Info   Changed   Cilcher Info   Changed   C		Oil Age	hrs	Client Info		500			
Filter Changed   Client Info   Changed   Client Info   Sample Status   Changed   Cha		Filter Age	hrs	Client Info		0			
NORMAL   N		Oil Changed		Client Info		Changed			
Iron		Filter Changed		Client Info		Changed			
All component wear rates are normal.    Chromium   ppm   ASTM 05165m   10   0		Sample Status				NORMAL			
All component wear rates are normal.    Chromium   ppm   ASTM 05165m   10   0	WEAD			40TM DE40E	400				
Nicke									
Titanium   ppm   ASTM DSISSES   0									
Silver   ppm   ASTM D5185m   > 2					>10				
Aluminum   ppm   ASTM D5185m   >20   <1									
Lead   ppm   ASTM DS185m   20   <1									
Copper									
Tin									
Vanadium   ppm   ASTM D5185m   NONE   NONE   NONE   Vellow Metal   scalar   Visual   NONE									
White Metal Yellow Metal   Scalar   Visual   NONE   NONE					>10				
Vellow Metal   Scalar   Visual   NONE   NO						-			
CONTAMINATION									
Potassium   ppm   ASTM 05185m   >20   2		Yellow Metal	scalar	*Visual	NONE	NONE			
Potassium   ppm   ASTM 05185m   >20   2	CONTAMINATION	Silicon	nnm	ASTM D5185m	>20	4			
Fuel   WC Method   >6.0   <1.0	CONTAMINATION		• • • • • • • • • • • • • • • • • • • •						
Water   WC Method   Neg             Glycol   WC Method   Soot % (MEthod   Neg	There is no indication of any contamination in the oil.		ррпп						
Glycol									
Soot % %					<i>&gt;</i> 0.1				
Nitration   Abs/cm   "ASTM D7624   >20   7.9		-	0/2		<b>\</b> 3				
Sulfation   Abs/.1mm   *ASTM D7415   >30   19.9									
Silt   Scalar   *Visual   NONE   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NONE   Scalar   *Visual   NORML   NORML   NORML   Scalar   *Visual   NORML   NORML   NORML   Scalar   *Visual   Scalar   *Visual   NORML   *Visual   NORML   *Visual   NORML   *Visual   NORML   *Visual   *Visual   NORML   *Visual   *Visual   *Visual   *Visual   *Visua									
Debris   Scalar   *Visual   NONE   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NORML   NORML									
Sand/Dirt   Scalar   *Visual   NONE   NORE       NORE   Appearance   Scalar   *Visual   NORML   NORM									
Appearance									
Calcium   Calc									
Emulsified Water   scalar   *Visual   >0.1   NEG		• •							
Sodium   ppm   ASTM D5185m   1									
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.    Boron   ppm   ASTM D5185m   0.0   0   0   0   0   0   0   0   0									
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.    Boron   ppm   ASTM D5185m   0.0   0   0   0   0   0   0   0   0	FLUID CONDITION	Sodium	ppm	ASTM D5185m		1			
oil. The condition of the oil is suitable for further service.    Molybdenum   ppm   ASTM D5185m   0.7   58         Magnesium   ppm   ASTM D5185m   0.0   1         Magnesium   ppm   ASTM D5185m   256   872         Calcium   ppm   ASTM D5185m   2057   1293         Phosphorus   ppm   ASTM D5185m   935   1106         Zinc   ppm   ASTM D5185m   1223   1297         Sulfur   ppm   ASTM D5185m   4079   3697         Oxidation   Abs/.1mm   *ASTM D7414   >25   16.4         Base Number (BN)   mg KOH/g   ASTM D2896   10   9.7		Boron	ppm	ASTM D5185m	2.5	15			
Molybdenum         ppm         ASIM D5185m         0.7         58             Manganese         ppm         ASTM D5185m         0.0         1             Magnesium         ppm         ASTM D5185m         256         872             Calcium         ppm         ASTM D5185m         2057         1293             Phosphorus         ppm         ASTM D5185m         935         1106             Zinc         ppm         ASTM D5185m         1223         1297             Sulfur         ppm         ASTM D5185m         4079         3697             Oxidation         Abs/.1mm         *ASTM D7414         >25         16.4             Base Number (BN)         mg KOH/g         ASTM D2896         10         9.7		Barium	ppm	ASTM D5185m	0.0	0			
Magnesium         ppm         ASTM D5185m         256         872             Calcium         ppm         ASTM D5185m         2057         1293             Phosphorus         ppm         ASTM D5185m         935         1106             Zinc         ppm         ASTM D5185m         1223         1297             Sulfur         ppm         ASTM D5185m         4079         3697             Oxidation         Abs/.1mm         *ASTM D7414         >25         16.4             Base Number (BN)         mg KOH/g         ASTM D2896         10         9.7		Molybdenum	ppm	ASTM D5185m	0.7	58			
Calcium         ppm         ASTM D5185m         2057         1293             Phosphorus         ppm         ASTM D5185m         935         1106             Zinc         ppm         ASTM D5185m         1223         1297             Sulfur         ppm         ASTM D5185m         4079         3697             Oxidation         Abs/.1mm         *ASTM D7414         >25         16.4             Base Number (BN)         mg KOH/g         ASTM D2896         10         9.7		Manganese	ppm	ASTM D5185m	0.0	1			
Phosphorus         ppm         ASTM D5185m         935         1106             Zinc         ppm         ASTM D5185m         1223         1297             Sulfur         ppm         ASTM D5185m         4079         3697             Oxidation         Abs/.1mm         *ASTM D7414         >25         16.4             Base Number (BN)         mg KOH/g         ASTM D2896         10         9.7		Magnesium	ppm	ASTM D5185m	256	872			
Zinc         ppm         ASTM D5185m         1223         1297             Sulfur         ppm         ASTM D5185m         4079         3697             Oxidation         Abs/.1mm         *ASTM D7414         >25         16.4             Base Number (BN)         mg KOH/g         ASTM D2896         10         9.7		Calcium	ppm			1293			
Sulfur         ppm         ASTM D5185m         4079         3697             Oxidation         Abs/.1mm         *ASTM D7414         >25         16.4             Base Number (BN)         mg KOH/g         ASTM D2896         10         9.7		Phosphorus	ppm	ASTM D5185m	935	1106			
Oxidation         Abs/.1mm         *ASTM D7414         >25         16.4             Base Number (BN)         mg KOH/g         ASTM D2896         10         9.7		Zinc	ppm	ASTM D5185m	1223	1297			
Base Number (BN) mg KOH/g		Sulfur	ppm	ASTM D5185m	4079	3697			
		Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4			
Visc @ 100°C cSt ASTM D445 15.0 ( 13.9 )		Base Number (BN)	mg KOH/g	ASTM D2896	10	9.7			
		Visc @ 100°C	cSt	ASTM D445	15.0	13.9			





Laboratory Sample No.

Lab Number : 06229797 Unique Number : 11113290

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : VCP447731

Received **Tested** 

: 08 Jul 2024 : 09 Jul 2024 Diagnosed : 09 Jul 2024 - Wes Davis

56195 PONTIAC TRAIL

**ALTA EQUIPMENT COMPANY - METRO WEST** 

NEW HUDSON, MI US 48165

Contact: PAUL ELZERMAN paul.elzerman@altaequipment.com

T: (248)356-5200 F: (248)356-2029

Test Package : MOB 1 ( Additional Tests: TBN ) 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)