WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

Area

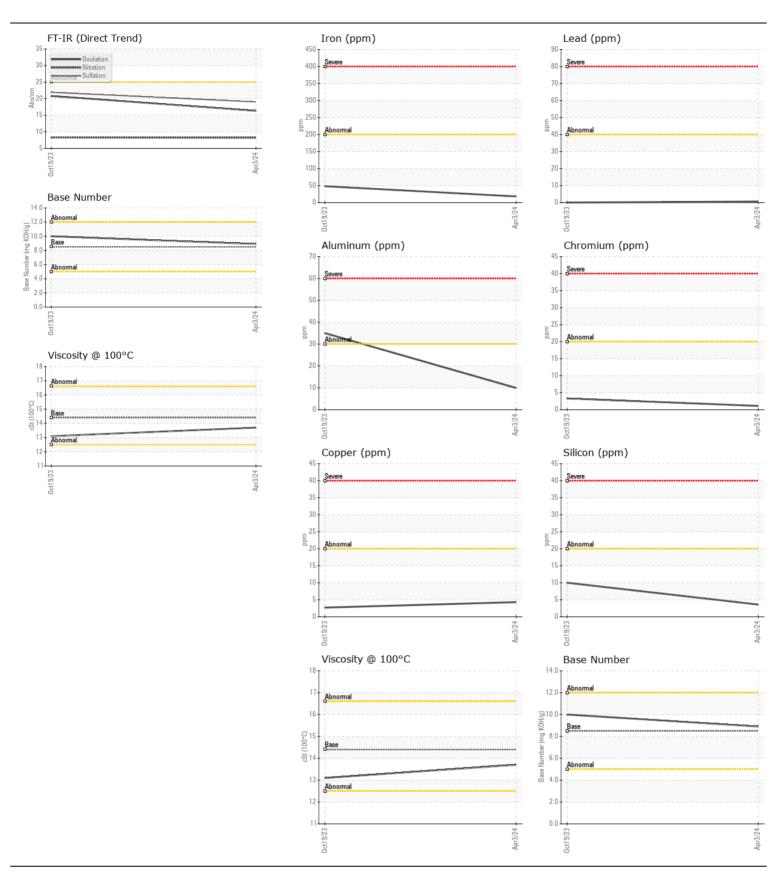
[SPM700166 RENTALS]

VOLVO L70H 624047

Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

Test	DIESEL ENGINE OIL SAE 15W40 (GAL)								
Resample at the next service interval to monitor. Sample Date Client Info O O O O O O O O O	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	Historv2	
Name	TESSIMIENSATION						,		
Machino Age hrs Client Info 0 0 0 0 0 0 0 0 0	Resample at the next service interval to monitor.	•							
Oil Age hrs Client Info O O			hrs						
Filter Age Ol Changed Client Info Changed Chan		Oil Age		Client Info					
Oil Changed Client Info Changed Chang							0		
Filter Changed Sample Status Sample Status Sample Status Sample Status NoRMAL ABNORMAL ABNORMAL						Changed			
No.				Client Info					
Iron		_				_	_		
All component wear rates are normal. Chromium ppm ASTM D5165m 50									
Nicke	WEAR		ppm	ASTM D5185m	>200	18	48		
Titanium ppm ASTM D5185m 2	All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	1	3		
Silver ppm		Nickel	ppm	ASTM D5185m	>5	0	<1		
Aluminum ppm ASTM D5186m >30 10 A 35		Titanium	ppm	ASTM D5185m		0	<1		
Lead ppm ASTM DS185m >40 <1 0		Silver	ppm	ASTM D5185m	>2	0	0		
Copper		Aluminum	ppm	ASTM D5185m	>30	10	<u></u> 4 3 5 ≤		
Tin		Lead	ppm	ASTM D5185m	>40	<1	0		
Vanadium Vanadium		Copper	ppm	ASTM D5185m	>20	4	3		
White Metal Yellow Metal Scalar *Visual NONE NONE		Tin	ppm	ASTM D5185m	>20	1	2		
Silicon ppm ASTM D5185m >20 4 10		Vanadium	ppm	ASTM D5185m			<1		
Silicon ppm ASTM D5185m >20 4 10		White Metal	scalar	*Visual	NONE	NONE	NONE		
Potassium ppm ASTM D5185m > 20 0 2		Yellow Metal	scalar	*Visual	NONE	NONE	NONE		
Potassium ppm ASTM D5185m > 20 0 2	CONTAMINATION	Ciliaan		ACTM DE10Em	. 00	A	10		
Fuel WC Method Se.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1	CONTAMINATION		• •						
Water WC Method Sol NEG NEG NEG Sol NEG NE	There is no indication of any contamination in the oil.		ppm						
Glycol WC Method NEG NEG									
Soot % % 'ASTM D7844 >3					>0.2				
Nitration Abs/cm "ASTM D7624 >20 8.2 8.3		-	0/		. 2				
Sulfation Abs./.tmm *ASTM D7415 >30 19.0 21.9									
Silt Scalar *Visual NONE NO									
Debris Scalar *Visual NONE NORML N									
Sand/Dirt Scalar *Visual NONE NONE NONE Appearance Scalar *Visual NORML NORM									
Appearance									
Oddr Scalar *Visual NORML NO						_			
Emulsified Water scalar *Visual >0.2 NEG NEG									
Sodium ppm ASTM D5185m >158 <1 3									
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 250 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 250 0	FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	<1	3		
oil. The condition of the oil is suitable for further service. Molybdenum ppm ASTM D5185m 100 57 42		Boron	ppm	ASTM D5185m	250	0	33		
Molybdenum ppm ASIM D5185m 100 57 42 Manganese ppm ASTM D5185m <1 <1 Magnesium ppm ASTM D5185m 450 967 549 Calcium ppm ASTM D5185m 3000 1194 1535 Phosphorus ppm ASTM D5185m 1150 1061 967 Zinc ppm ASTM D5185m 1350 1221 1145 Sulfur ppm ASTM D5185m 4250 3637 3436 Oxidation Abs/.1mm *ASTM D7414 >25 16.3 20.8 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.9 10.0	, ,		ppm	ASTM D5185m	10	0	0		
Magnesium ppm ASTM D5185m 450 967 549 Calcium ppm ASTM D5185m 3000 1194 1535 Phosphorus ppm ASTM D5185m 1150 1061 967 Zinc ppm ASTM D5185m 1350 1221 1145 Sulfur ppm ASTM D5185m 4250 3637 3436 Oxidation Abs/.1mm *ASTM D7414 >25 16.3 20.8 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.9 10.0		Molybdenum	ppm	ASTM D5185m	100	57	42		
Calcium ppm ASTM D5185m 3000 1194 1535 Phosphorus ppm ASTM D5185m 1150 1061 967 Zinc ppm ASTM D5185m 1350 1221 1145 Sulfur ppm ASTM D5185m 4250 3637 3436 Oxidation Abs/.1mm *ASTM D7414 >25 16.3 20.8 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.9 10.0		Manganese	ppm	ASTM D5185m		<1	<1		
Phosphorus ppm ASTM D5185m 1150 1061 967 Zinc ppm ASTM D5185m 1350 1221 1145 Sulfur ppm ASTM D5185m 4250 3637 3436 Oxidation Abs/.1mm *ASTM D7414 >25 16.3 20.8 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.9 10.0			ppm	ASTM D5185m	450	967	549		
Zinc ppm ASTM D5185m 1350 1221 1145 Sulfur ppm ASTM D5185m 4250 3637 3436 Oxidation Abs/.1mm *ASTM D7414 >25 16.3 20.8 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.9 10.0			ppm						
Sulfur ppm ASTM D5185m 4250 3637 3436 Oxidation Abs/.1mm *ASTM D7414 >25 16.3 20.8 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.9 10.0			ppm						
Oxidation Abs/.1mm *ASTM D7414 >25 16.3 20.8 Base Number (BN) mg KOH/g ASTM D2896 8.5 8.9 10.0			ppm						
Base Number (BN) mg KOH/g ASTM D2896 8.5 8.9 10.0			ppm	ASTM D5185m	4250				
Visc @ 100°C cSt ASTM D445 14.4 13.7 13.1									
		Visc @ 100°C	cSt	ASTM D445	14.4	13.7	13.1		







Laboratory Sample No.

: VCP425254 Lab Number : 06153883

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

Received **Tested** Unique Number : 10989306

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

: 19 Apr 2024 : 22 Apr 2024

: 22 Apr 2024 - Wes Davis

ALTA EQUIPMENT CO - ORLAND PARK 5000 INDUSTRIAL HWY GARY, IN

US 46406 Contact: DAVE ENG DAVE.ENG@ALTG.COM T: (312)350-2560

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)