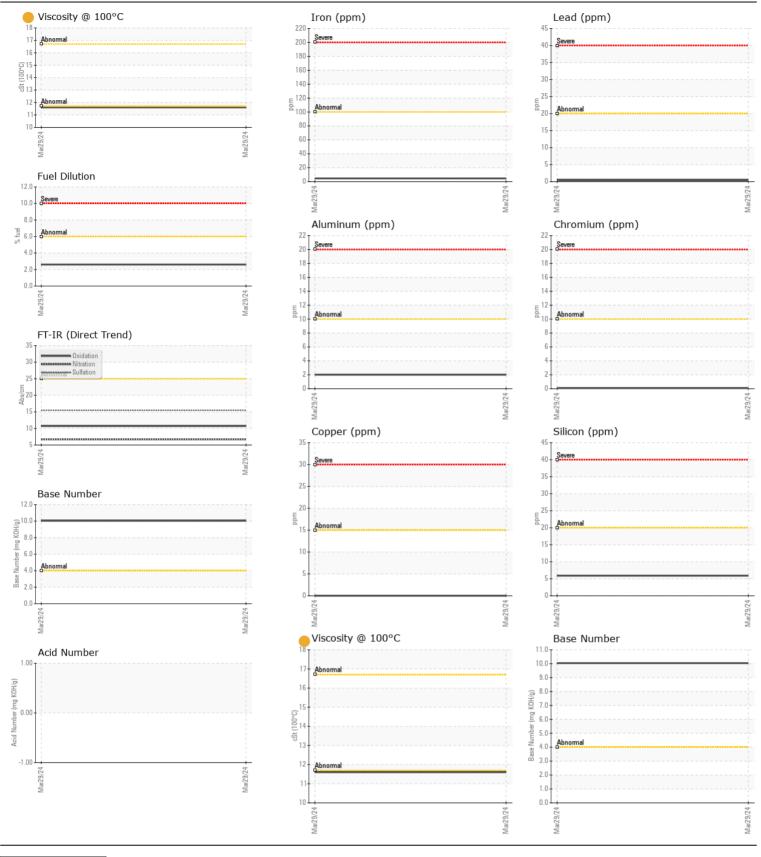


OIL ANALYSIS REPORT

Machine Id VOLVO L60E VOLVO L60E Component Diesel Engine Fluid NAVIGARD 15W40 PREMIUM CJ4 (5 GAL)

Test UOM Memory Linking History 1 History 2 No corrective action is recommended at this time. Resample at the next service interval to monitor. Sample Automic Correction 1 History 1 History 2 Image: Correction 2 Sample Automic Correction 2 Sample Automic Correction 2 Sample Automic Correction 2 Sample Automic Correction 2 Image: Correction 2	······································					~~~~~		
No corrective action is recommended at this time. Resample at the next service interval to monitor. Sample Date Client Info 98 Mar 2004	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Itext service interval to monitor. Sample Data Chain Intolo Sample Data Chain Intolo Sample Data Content intolo Note Data <th rowspan="3">No corrective action is recommended at this time. Resample at the</th> <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>TR06220430</th> <th></th> <th></th>	No corrective action is recommended at this time. Resample at the	Sample Number		Client Info		TR06220430		
Machine Age Ins Clind Info 8306 Image Image Oil Age Ins Clind Info 73 Image Image Filter Age Ins Clind Info Not Change Image Image </th <th>Sample Date</th> <th></th> <th>Client Info</th> <th></th> <th>29 Mar 2024</th> <th></th> <th></th>		Sample Date		Client Info		29 Mar 2024		
Filter Åge Ins Cilent Info 73		Machine Age	hrs	Client Info		8306		
Oil Changed Filter Changed Sample Status Client Info Not Changed Sample Status Not Changed Not Changed ATTENTION		Oil Age	hrs			73		
Filter Changed Sample Status Client Into Not Change NTENTON			hrs	Client Info		73		
Sample Status VTENIO ··· ··· WEAR Iron pp All component wear rates are normal. Iron pp All component wear rates are normal. Iron pp All component wear rates are normal. Iron pp K5110 5155 10 0 Iron Iron PI Status Iron PI Iron PI Iron PI Iron Iron PI Iron Iron <t< th=""><th></th><th>-</th><th></th><th>Client Info</th><th></th><th>•</th><th></th><th></th></t<>		-		Client Info		•		
WEAR Iron ppm ASTM0518m 100 4 All component wear rates are normal. Phome AstM0518m >10 0 Nickel ppm ASTM0518m >10 0 Silver ppm ASTM0518m >20 0 All immunp pm ASTM0518m >20 0 All immunp pm ASTM0518m >20 0		-		Client Info		-		
All component wear rates are normal. Chromium ppm ASIM Distan >0 <1		Sample Status				ATTENTION		
All component wear rates are normal. Chromium ppm ASTM D618m >10 <1		Iron	nnm	ACTM DE105m	× 100			
All component wear rates are normal. Nickel ppm ASTM D518m >10 0 Titranium ppm ASTM D518m >2 0 Allurinium ppm ASTM D518m >20 0 Allurinium ppm ASTM D518m >20 1 Allurinium ppm ASTM D518m >20 0 Allurinium ppm ASTM D518m >10 0 Allurinium ppm ASTM D518m >10 0 Valued NONE								
Titanium ppm ASTM 05156 0 1 Silver ppm ASTM 05156 >2 0 Silver ppm ASTM 05156 >2 0 Lead ppm ASTM 05156 >20 <11 Copper ppm ASTM 05156 10 0 Tin ppm ASTM 05156 10 0 Vanadium ppm ASTM 05156 10 0 Vanadium ppm ASTM 05156 10 0 Vanadium ppm ASTM 05156 20 6 Valow Metal scalar Visual NONE NONE Solicon ppm ASTM 05265 20 6 Water Visual NONE NONE								
Silver ppm ASTM D5155n -2 0 Aluminum ppm ASTM D5155n -10 2 Lead ppm ASTM D5155n -20 -1 Copper ppm ASTM D5155n -20 -1 Vanadium ppm ASTM D5155n -15 0 Vanadium ppm ASTM D5155n -20 -1 Vallow Metal Scalar Visual NONE NONE Vallow Metal Scalar Visual NONE Fuel % ASTM D5155n -20 6 Silicon ppm ASTM D5155n -20 6 Silicon ppm ASTM D5155n -20 6.7 Rota <t< th=""><th></th><th></th><th></th><th>>10</th><th></th><th></th><th></th></t<>					>10			
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Lead ppm ASTM D518sn >20 <1 Copper ppm ASTM D518sn >10 0 Tin ppm ASTM D518sn 10 0 Vanadium ppm ASTM D518sn 10 0 Vanadium ppm ASTM D518sn 10.0 Vanadium ppm ASTM D518sn 10.0NE NONE Value Solar 'Visual NONE NONE Fuel ontent negligible. There is no indication of any contamination in the oil. Silicon ppm ASTM D518sn 20 3 Fuel value % ASTM D518sn 0.0 NEG Solor % % % M21M D518sn 30 0.1								
Copper ppm ASTM D5180m >15 0 Tin ppm ASTM D5180m >15 0 Vanadium ppm ASTM D5180m <1 White Metal scalar 'Visual NONE Fuel content negligible. There is no indication of any contamination in the oil. Silicon ppm ASTM D5356m 20 6 Fuel % ASTM D5356m 20.0 3 Glycol WC Method NEG Solf % % % MSTM D584m 20 6.7 Solf % % % MSTM D784 >3 0.1 Solf % % % %STM D784 >3 0.1 Solf % % %STM D784 >3 0.1								
Tin ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m - -< White Metal scalar Visual NONE NONE NONE CONTAMINATION Silicon ppm ASTM D5185m >20 6 Fuel potassium ppm ASTM D5185m >20 6 Potassium ppm ASTM D5185m >20 6 Value % ASTM D5185m >20 6 Value % ASTM D5185m >20 6 Sold % % MSTM D744 >30 15.5 Sulfation Abs/m *ASTM D7182 >30 15.5 Sulfation Abs/m *ASTM D7184 >30 15.5								
Vanadium ppm ASTM D5185m <1								
White Metal Yellow Metal scalar 'Visual NONE Inc. Inc. Inc. CONTAMINATION Scalar Visual NONE RONE Inc. Inc. Inc. Fuel content negligible. There is no indication of any contamination in the oil. Silicon ppm ASTM 05185m >20 6 Inc. Inc. Glycol Water % ASTM 0524 >0.1 NEG Inc. Inc. Glycol WC Method >0.1 Inc.					10			
Yellow Metal scalar *Visual NONE CONTAMINATION Silicon ppm ASTM 05185m >20 6 Potassium ppm ASTM 05185m >20 3 Potassium ppm ASTM 05185m >20 3 Fuel % ASTM 05185m >20 3 WC Method 0.1 NEG Site on % % 'ASTM 05185m >0.1 Site on % % 'ASTM 07844 >3 0.1 Sold % % % 'ASTM 07844 >30 15.5 Sulfation Abs/tm< 'ASTM 07415 >30 15.5 Sulfation Abs/tm< 'ASTM 07415 >30 15.5					NONE			
CONTAMINATION Silicon ppm ASTM D5185m >20 6 Fuel content negligible. There is no indication of any contamination in the oil. Silicon ppm ASTM D5185m >20 3 Fuel % ASTM D5185m >20 2.6 Water WC Method >0.1 NEG Water WC Method >0.1 NEG Silf 001% %6 'ASTM D78/4 >3 0.1 Silf atoin Abs/tm< 'ASTM D78/4 >30 0.5 Silf atoin Abs/tm< 'ASTM D78/4 >30 15.5 Silf atoin Abs/tm< 'ASTM D78/4 >30 15.5 Silf atoin Abs/tm< 'ASTM D78/4 >30 15.5 Debris scalar 'Visual NONE NORE Appearance sc								
Fuel content negligible. There is no indication of any contamination in the oil. Potassium ppm ASTM D5156m >20 3 Fuel % ASTM D5324 >6.0 2.6 Water WC Method >0.1 NEG Glycol WC Method >0.1 NEG Soot % % %STM D7824 >20 6.7 Nitration Abs/tm *ASTM D7624 >20 6.7 Sulfation Abs/tm *ASTM D7645 >30 15.5 Sulfation Abs/tm *ASTM D7645 >0 Subperance <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>								
Fuel % ASTM D3524 >6.0 2.6 Water WC Method >0.1 NEG Water WC Method >0.1 NEG Glycol WC Method >0.1 NEG Soot % % ASTM D7624 >20 6.7 Nitration Abs/tm 'NSIM D7624 >20 6.7 Sulfation Abs/tm 'NSIM D7415 >30 15.5 Sulfation Abs/tm 'NSIM D7415 >30 15.5 Sulfation Abs/tm 'NSIM D7415 >30 15.5 Sulfation Abs/tm 'NSIM NONE NONE NONE Sulfation scalar 'Visual NONE NONE Sulfation scalar 'Visual NORM NORM Boron ppm <t< th=""><th>CONTAMINATION</th><th>Silicon</th><th>ppm</th><th>ASTM D5185m</th><th>>20</th><th>6</th><th></th><th></th></t<>	CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	6		
the oil. Not in Date 9-0.0 20.		Potassium	ppm	ASTM D5185m	>20	3		
Water WC Method NEG		Fuel	%	ASTM D3524	>6.0	2.6		
Soot % % *ASTM D7844 >3 0.1 Nitration Abs/m *ASTM D7624 >20 6.7 Sulfation Abs/lm 'Astm D7624 >00 15.5 Sulfation Abs/lm 'Astm D7624 NONE NONE Debris scalar 'Visual NONE NONE Appearance scalar 'Visual NORML NORML Odor scalar 'Visual NORML NORML Bron		Water			>0.1	NEG		
Nitration Abs/cm *ASTM D7624 >-20 6.7 Sulfation Abs/tmm *ASTM D7415 >30 15.5 Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NORE Appearance scalar *Visual NORM NORM Odor scalar *Visual NORM NORM Odor scalar *Visual NORM NORM Odor scalar *Visual NORM NORM Brono ppm ASTM D5185m 1 Brono ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 11 Magnesium ppm ASTM D5185m 11 <th></th> <th>,</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>		,						
Sulfation Abs/Imm *ASTM D7415 >30 15.5 Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORM NORM Odor scalar *Visual NORM NORM			%	*ASTM D7844	>3			
Siltscalar*VisualNONENONEDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*VisualNORMLNORMLNORMLFLUID CONDITIONSodiumppmASTM D5185m1BoronppmASTM D5185m084BariumppmASTM D5185m0111MalybdenumppmASTM D5185m1MagnesiumppmASTM D5185m1MagnesiumppmASTM D5185m1MagnesiumppmASTM D5185m1GalciumppmASTM D5185m11SulfurppmASTM D5185m1184SulfurppmASTM D5185m1184SulfurppmASTM D5185m10.041164ASM D5185m11841SulfurppmASTM D5185m10.041								
Debrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLThe oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.SodiumppmASTM D5185m1BoronppmASTM D5185m0MolybdenumppmASTM D5185m0MarganeseppmASTM D5185m<111MarganeseppmASTM D5185m<111MarganeseppmASTM D5185m<1184The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.SodiumppmASTM D5185m0MarganeseppmASTM D5185m<111MarganeseppmASTM D5185m<102SulfurppmASTM D5185m1184								
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Emulsified Waterscalar*Visual>0.1NEGFLUID CONDITIONSodiumppmASTM D5185m1BoronppmASTM D5185m084BariumppmASTM D5185m0MolybdenumppmASTM D5185m0MaganeseeppmASTM D5185m111MagnesiumppmASTM D5185m300MagnesiumppmASTM D5185m300MagnesiumppmASTM D5185m1036PhosphorusppmASTM D5185m1184SulfurppmASTM D5185m1184OxidationAbs/.1mm'ASTM D7414>2510.7Base Number (BN)mg KOHlyASTM D288610.04								
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ManganeseppmASTM D5185m<1								
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Calcium ppm ASTM D5185m 2129 Phosphorus ppm ASTM D5185m 1036 Zinc ppm ASTM D5185m 1184 Sulfur ppm ASTM D5185m 4459 Oxidation Abs/.tmm *ASTM D7414 >25 10.7 Base Number (BN) mg KOH/g ASTM D2896 10.04		•						
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Zinc ppm ASTM D5185m 1184 Sulfur ppm ASTM D5185m 4459 Oxidation Abs/.tmm *ASTM D7414 >25 10.7 Base Number (BN) mg KOH/g ASTM D2896 10.04								
Sulfur ppm ASTM D5185m 4459 Oxidation Abs/.1mm *ASTM D7414 >25 10.7 Base Number (BN) mg KOH/g ASTM D2896 Integration								
Oxidation Abs/.1mm *ASTM D7414 >25 10.7 Base Number (BN) mg KOH/g ASTM D2896 10.04		Sulfur				4459		
Base Number (BN) mg KOH/g ASTM D2896 10.04					>25			
Visc @ 100°C cSt ASTM D445			mg KOH/g			10.04		
		Visc @ 100°C	cSt	ASTM D445		11.6		



CANTERBURY TIMBER CO Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. Received : 25 Jun 2024 57 OLD GILMANTON RD : TR06220430 Lab Number : 06220430 Tested : 28 Jun 2024 CANTERBURY, NH Unique Number : 11098627 Diagnosed : 28 Jun 2024 - Jonathan Hester US 03224 Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel, TAN Man) Contact: DON PERCY Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-827-0711. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Contact/Location: DON PERCY - CANCANNH Page 2 of 2