WEAR CONTAMINATION FLUID CONDITION

ABNORMAL NORMAL NORMAL

Machine Id

6221295

Diesel Engine

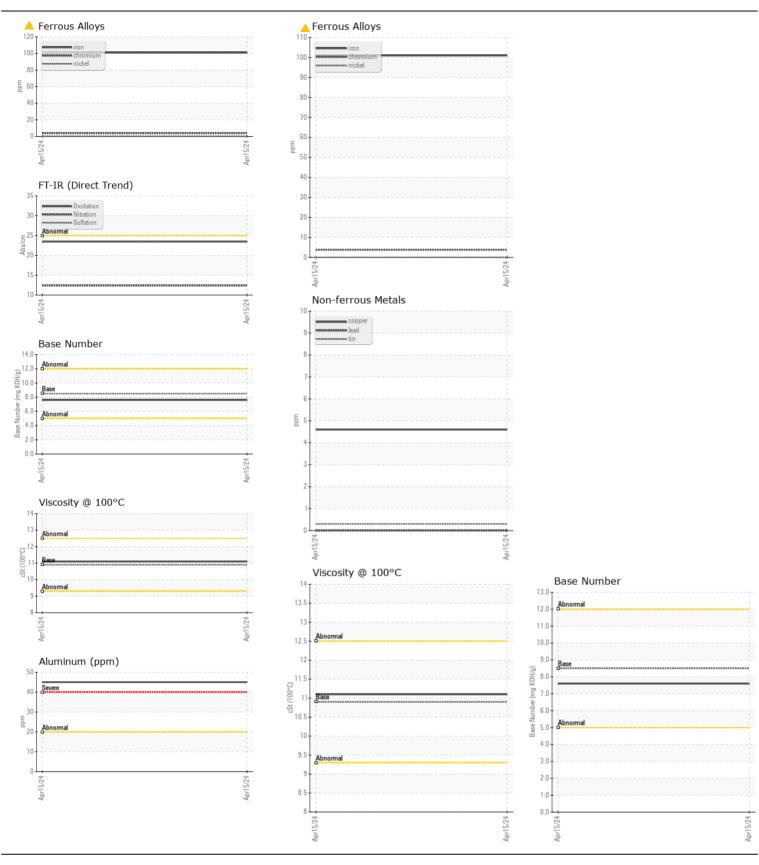
DIESEL ENGINE OIL SAE 30 (--- QTS)

Test	Sample Number Client Info IL06149995	
No corrective action is recommended at this time. Resample at the next service interval to monitor.   Sample Date   Client Info   15 Apr 2024     Client Info   0       Client Info   0       Client Info   0       Client Info   0         Client Info   0         Client Info   0         Client Info   0	Sample Number Client Info IL06149995	
Name	the Sample Date Client Info 15 Apr 2024	ole Number
Machine Age   mls   Client Info   0             Filter Age   mls   Client Info   0           Filter Age   mls   Client Info   0           Filter Age   mls   Client Info   0           Filter Changed   Client Info   N/A         Filter Changed   Client Info   N/A         Sample Status   ABNORMAL         Cylinder, crank, or cam shaft wear is indicated.		ple Date
Filter Age	Machine Age mls Client Info 0	nine Age
N/A   N/A	Oil Age mls Client Info 0	.ge
Filter Changed   Sample Status	Filter Age mls Client Info 0	Age
Iron	Oil Changed Client Info N/A	hanged
Iron	Filter Changed Client Info N/A	Changed
Chromium   ppm   ASTM D5185m   >20   4       Nickel   ppm   ASTM D5185m   >4   0       Titanium   ppm   ASTM D5185m   >4   0       Titanium   ppm   ASTM D5185m   >3   0       Aluminum   ppm   ASTM D5185m   >3   0       Aluminum   ppm   ASTM D5185m   >20   45       Aluminum   ppm   ASTM D5185m   >20   45       Aluminum   ppm   ASTM D5185m   >20   45       Lead   ppm   ASTM D5185m   >30   5       Lead   ppm   ASTM D5185m   >30   5       Tin   ppm   ASTM D5185m   >15   <1       Vanadium   ppm   ASTM D5185m   >20       Visual   NONE   NONE       Volume   WC Method   >0.2   NEG       Valuer   WC M517 D7844   >3   0.9       Valuer   ASTM D7624   >20   12.4       Valuer   ASSTM D7844   >3   0.9       Valuer   ASSTM D7845   >4   0.0       Valuer   ASSTM D7844   >3   0.9	Sample Status ABNORMAL	ple Status
Chromium   ppm   ASTM D5185m   >20   4       Nickel   ppm   ASTM D5185m   >4   0       Titanium   ppm   ASTM D5185m   >4   0       Titanium   ppm   ASTM D5185m   >3   0       Aluminum   ppm   ASTM D5185m   >20   45       Lead   ppm   ASTM D5185m   >30   5       Lead   ppm   ASTM D5185m   >30   5       Tin   ppm   ASTM D5185m   >15   <1       Vanadium   ppm   ASTM D5185m   >20   77       Fuel   % ASTM D5185m   >20   77	Iron ppm ASTM D5185m >100 ▲ <b>101</b>	
Nickel   ppm   ASTM D5185m   >4   0		mium
Titanium   ppm   ASTM D5185m   >3   0		
Silver		
Aluminum   ppm   ASTM D5185m   >20   45		
Lead		
Copper		
Tin	11	
Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE  Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.  Silicon ppm ASTM D5185m >25 12 Potassium ppm ASTM D5185m >20 77 Fuel % ASTM D3524 >5 <1.0 Water WC Method >0.2 NEG Glycol WC Method NEG Soot % % *ASTM D7844 >3 0.9 Nitration Abs/cm *ASTM D7844 >3 0.9 Silt scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Appearance scalar *Visual NONE NONE NORML		,01
White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON		adium
Yellow Metal scalar *Visual NONE NONE  CONTAMINATION  Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.  Silicon ppm ASTM D5185m >20 77  Fuel % ASTM D3524 >5 <1.0  Water WC Method >0.2 NEG  Glycol WC Method >0.2 NEG  Glycol WC Method >0.2 NEG  Soot % *ASTM D7844 >3 0.9  Nitration Abs/cm *ASTM D7824 >20 12.4  Sulfation Abs/.1mm *ASTM D7824 >20 12.4  Silt scalar *Visual NONE NONE  Debris scalar *Visual NONE NONE  Appearance scalar *Visual NONE NONE  Appearance scalar *Visual NORML NORML		
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Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.  Potassium ppm ASTM D5185m > 20 77 Fuel % ASTM D3524 > 5 < 1.0 Water WC Method > 0.2 NEG Glycol WC Method NEG Soot % % *ASTM D7844 > 3 0.9 Nitration Abs/cm *ASTM D7624 > 20 12.4 Sulfation Abs/.1mm *ASTM D7415 > 30 23.4 Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Appearance scalar *Visual NONE NONE	10.01	
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your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.  Water  Glycol  WC Method  NEG  NEG  NEG  NItration  Abs/cm  *ASTM D7844  >3  0.9  Nitration  Abs/cm  *ASTM D7844  >3  0.9  Nitration  Abs/cm  *ASTM D7845  >30  23.4   Sulfation  Abs/.tmm  *ASTM D7845  >30  23.4   Silt  Scalar  *Visual  NONE  NONE  NONE  Appearance  Scalar  *Visual  NONE	Potassium ppm ASTM D5185m >20 77	ssium
lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.  Water Glycol WC Method NEG		
Soot %	Mator Michael > () () NIEC	er .
Soot %       %       *ASTM D7844       >3       0.9          Nitration       Abs/cm       *ASTM D7624       >20       12.4          Sulfation       Abs/.1mm       *ASTM D7415       >30       23.4          Silt       scalar       *Visual       NONE       NONE         Debris       scalar       *Visual       NONE       NONE         Sand/Dirt       scalar       *Visual       NONE       NONE         Appearance       scalar       *Visual       NORML       NORML	Glycol WC Method NEG	ol
SulfationAbs/.1mm*ASTM D7415>3023.4Siltscalar*VisualNONENONEDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORML	Soot %	%
Silt scalar *Visual NONE NONE  Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML	Nitration Abs/cm *ASTM D7624 >20 12.4	tion
Debrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORML	Sulfation         Abs/.1mm         *ASTM D7415         >30         23.4	ıtion
Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML	Silt scalar *Visual NONE NONE	
Appearance scalar *Visual NORML		is
	Sand/Dirt scalar *Visual NONE NONE	∄/Dirt
Odor scalar *Visual NORML NORML	Appearance scalar *Visual NORML NORML	arance
		•
Emulsified Water   scalar   *Visual   >0.2   NEG	Emulsified Water   scalar   *Visual   >0.2   NEG	sified Water
FLUID CONDITION Sodium ppm ASTM D5185m >75 4	Sodium ppm ASTM D5185m >75 <b>4</b>	um
Boron ppm ASTM D5185m 250 <b>37</b>	Boron ppm ASTM D5185m 250 <b>37</b>	
The BN result indicates that there is suitable alkalinity remaining in the Barium ppm ASTM D5185m 10	n in the	
oil. The condition of the oil is acceptable for the time in service.  Molybdenum ppm ASTM D5185m 100 51		
Manganese ppm ASTM D5185m 2		
·		-
Calcium ppm ASTM D5185m 3000 1690	-	
Phosphorus ppm ASTM D5185m 1150 <b>815</b>	Magnesium         ppm         ASTM D5185m         450         579	sphorus
Zinc ppm ASTM D5185m 1350 <b>967</b>	Magnesium         ppm         ASTM D5185m         450         579             Calcium         ppm         ASTM D5185m         3000         1690	
Sulfur         ppm         ASTM D5185m         4250         2803	Magnesium         ppm         ASTM D5185m         450         579             Calcium         ppm         ASTM D5185m         3000         1690             Phosphorus         ppm         ASTM D5185m         1150         815	•
	Magnesium         ppm         ASTM D5185m         450         579             Calcium         ppm         ASTM D5185m         3000         1690             Phosphorus         ppm         ASTM D5185m         1150         815             Zinc         ppm         ASTM D5185m         1350         967	
Oxidation Abs/.1mm *ASTM D7414 >25 <b>23.5</b>	Magnesium         ppm         ASTM D5185m         450         579             Calcium         ppm         ASTM D5185m         3000         1690             Phosphorus         ppm         ASTM D5185m         1150         815             Zinc         ppm         ASTM D5185m         1350         967             Sulfur         ppm         ASTM D5185m         4250         2803	ır

Visc @ 100°C cSt

ASTM D445 10.9

11.1







Certificate L2367

Laboratory Sample No.

Lab Number : 06149995

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : IL06149995

Received **Tested** Unique Number : 10980073

Diagnosed Test Package : FLEET ( Additional Tests: FuelDilution )

: 17 Apr 2024 : 18 Apr 2024 - Sean Felton

: 16 Apr 2024

**IDEALEASE-NORCROSS** 4571 NORTH BUFORD HWY NORCROSS, GA US 30071-2808

Contact: RICK MARKS

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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