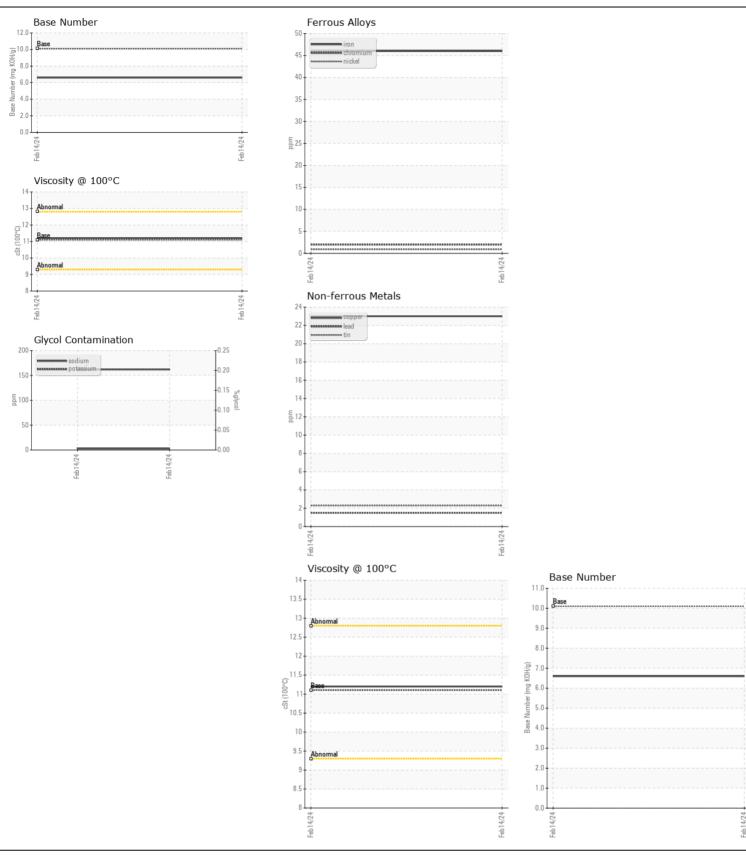


**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL NORMAL** 

Machine Id **857-5256** 

Test	Component Diesel Engine							
Test   UOM   Method   Current   Recommended at this time. Resample at the not service interval to monitor. Please specify the component make and model with your next sample.   Filter Changed   Client Info   Corrent	Fluid							
No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.    Machine Age   No   Client Info   0   0   0   0   0   0   0   0   0								
No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.   Sample Status	No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the component make		UOM		Limit/Abn		,	History2
Machino Ago   Into   Client Info   Machino Ago   Into   Client Info   O   O   O   O   O   O   O   O   O								
Oil Age   hrs   Client Info     O			laua					
Filter Age   Nrs   Cilent Info   OC   Nrs   Nr		•						
Oil Changed   Cilent Info   N/A								
Filter Changed   Sample Status   Cilent Info   NAM   NORMAL   NO		•	1115					
Metal levels are typical for a new component breaking in.   Iron		•						
Iron		•		Client into				
Metal levels are typical for a new component breaking in.   Nickel								
Nickel   ppm   ASTM D5165m   >4   <1	WEAR	Iron	ppm	ASTM D5185m	>100	46		
Nicket   Dpm   ASTM D5186m   <1		Chromium	ppm	ASTM D5185m	>20	2		
Silver   ppm   ASTM D5185m   >20   40		Nickel	ppm	ASTM D5185m	>4	<1		
Aluminum   ppm   ASTM D5185m   >20   40		Titanium	ppm	ASTM D5185m		<1		
Lead   ppm   ASTM D5185m   >40   2		Silver	ppm	ASTM D5185m	>3	<1		
Copper		Aluminum	ppm	ASTM D5185m	>20	40		
Tin		Lead	ppm	ASTM D5185m	>40	2		
Vanadium   ppm   ASTM D5185m   <1		Copper	ppm	ASTM D5185m	>330	23		
White Metal   Scalar   Visual   NONE   NON		Tin	ppm	ASTM D5185m	>15	2		
Vellow 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 05185m   >20   162           Wcd Method   >0.2   NEG           Wish D2982   NEG           Glycol   % 'ASTM D2982   NEG           Silit   Scalar   NASTM D7844   >3   0.2           Sulfation   Abs/imm   ASTM D7844   >3   0.2           Sulfation   Abs/imm   ASTM D7845   >0   9.6           Sulfation   Abs/imm   ASTM D7844   >3   0.2           Sulfation   Abs/imm   ASTM D585m   Abs/imm   ASTM D585m   Abs/imm   AsTM D585m   Abs/imm   Abs/imm   AsTM D585m   Abs/imm		Vanadium	ppm	ASTM D5185m		<1		
CONTAMINATION		White Metal	scalar	*Visual	NONE	NONE		
Potassium   Pota		Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium   Pota	CONTAMINATION	ACTM DE10Em	. 05	44				
Fuel   WC Method   >5   <1.0	CONTAMINATION							
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.         Need water (Glycol)         Need (Soot)         Need (	your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no		ppm			-		
Glycol   %   *ASTM D2882   NEG								
Soot %			0/2		>0.2			
Nitration   Abs/cm   *ASTM D7624   >20   9.6		,			~3			
Sulfation   Abs/.tmm   *ASTM D7415   >30   19.4								
Silt   scalar   *Visual   NONE   NONE   Debris   scalar   *Visual   NONE   NO								
Debris   Scalar   *Visual   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NORML   Scalar   *Visual   NORML   Scalar   *Visual   NORML   Scalar   *Visual   NORML   NORML   Scalar   *Visual   NORML   NORML   Scalar   *Visual   NORML   NORM								
Sand/Dirt   Scalar *Visual   NONE   NONE   NORML   Appearance   Scalar *Visual   NORML   NOR								
Appearance								
Codor   Scalar   Visual   NORML   NORML   NORML   Emulsified Water   Scalar   Visual   Visu								
Emulsified Water   scalar *Visual   >0.2   NEG								
Boron   ppm   ASTM D5185m   46           Barium   ppm   ASTM D5185m   6           Molybdenum   ppm   ASTM D5185m   6           Manganese   ppm   ASTM D5185m   13           Magnesium   ppm   ASTM D5185m   6           Magnesium   ppm   ASTM D5185m   6           Calcium   ppm   ASTM D5185m   1235           Phosphorus   ppm   ASTM D5185m   1260   686           Zinc   ppm   ASTM D5185m   1400   775           Sulfur   ppm   ASTM D5185m   2726           Oxidation   Abs/.1mm   *ASTM D7414   >25   15.6           Base Number (BN)   mg KOHlg   ASTM D2896   10.1   6.6			scalar					
Boron   ppm   ASTM D5185m   46           Barium   ppm   ASTM D5185m   6           Molybdenum   ppm   ASTM D5185m   6           Manganese   ppm   ASTM D5185m   13           Magnesium   ppm   ASTM D5185m   6           Magnesium   ppm   ASTM D5185m   6           Calcium   ppm   ASTM D5185m   1235           Phosphorus   ppm   ASTM D5185m   1260   686           Zinc   ppm   ASTM D5185m   1400   775           Sulfur   ppm   ASTM D5185m   2726           Oxidation   Abs/.1mm   *ASTM D7414   >25   15.6           Base Number (BN)   mg KOHlg   ASTM D2896   10.1   6.6								
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.    Barium   ppm   ASTM D5185m   13         Molybdenum   ppm   ASTM D5185m   6         Manganese   ppm   ASTM D5185m   642         Calcium   ppm   ASTM D5185m   1235         Phosphorus   ppm   ASTM D5185m   1260   686         Zinc   ppm   ASTM D5185m   1400   775         Sulfur   ppm   ASTM D5185m   2726         Oxidation   Abs/.1mm   *ASTM D7414   >25   15.6         Base Number (BN)   mg KOHlg   ASTM D2896   10.1   6.6	FLUID CONDITION		ppm					
oil. The condition of the oil is suitable for further service.    Molybdenum   ppm   ASTM D5185m   13         Manganese   ppm   ASTM D5185m   6         Magnesium   ppm   ASTM D5185m   642         Calcium   ppm   ASTM D5185m   1235         Phosphorus   ppm   ASTM D5185m   1260   686         Zinc   ppm   ASTM D5185m   1400   775         Sulfur   ppm   ASTM D5185m   1400   775         Sulfur   ppm   ASTM D5185m   2726         Oxidation   Abs/.1mm   *ASTM D7414   >25   15.6         Base Number (BN)   mg KOHlg   ASTM D2896   10.1   6.6	The RN result indicates that there is suitable alkalinity remaining in the		ppm					
Molybdenum         ppm         ASTM D5185m         13             Manganese         ppm         ASTM D5185m         6             Magnesium         ppm         ASTM D5185m         642             Calcium         ppm         ASTM D5185m         1235             Phosphorus         ppm         ASTM D5185m         1260         686             Zinc         ppm         ASTM D5185m         1400         775             Sulfur         ppm         ASTM D5185m         2726             Oxidation         Abs/.1mm         *ASTM D7414         >25         15.6            Base Number (BN)         mg KOH/g         ASTM D2896         10.1         6.6	, ,		ppm					
Magnesium         ppm         ASTM D5185m         642             Calcium         ppm         ASTM D5185m         1235             Phosphorus         ppm         ASTM D5185m         1260         686             Zinc         ppm         ASTM D5185m         1400         775             Sulfur         ppm         ASTM D5185m         2726             Oxidation         Abs/.1mm         *ASTM D7414         >25         15.6             Base Number (BN)         mg KOH/g         ASTM D2896         10.1         6.6								
Calcium         ppm         ASTM D5185m         1235             Phosphorus         ppm         ASTM D5185m         1260         686             Zinc         ppm         ASTM D5185m         1400         775             Sulfur         ppm         ASTM D5185m         2726             Oxidation         Abs/.1mm         *ASTM D7414         >25         15.6             Base Number (BN)         mg KOH/g         ASTM D2896         10.1         6.6		_						
Phosphorus         ppm         ASTM D5185m         1260         686             Zinc         ppm         ASTM D5185m         1400         775             Sulfur         ppm         ASTM D5185m         2726             Oxidation         Abs/.1mm         *ASTM D7414         >25         15.6             Base Number (BN)         mg KOH/g         ASTM D2896         10.1         6.6		•						
Zinc         ppm         ASTM D5185m         1400         775             Sulfur         ppm         ASTM D5185m         2726             Oxidation         Abs/.1mm         *ASTM D7414         >25         15.6             Base Number (BN)         mg KOH/g         ASTM D2896         10.1         6.6			• • • • • • • • • • • • • • • • • • • •		1000			
Sulfur         ppm         ASTM D5185m         2726             Oxidation         Abs/.1mm         *ASTM D7414         >25         15.6             Base Number (BN)         mg KOH/g         ASTM D2896         10.1         6.6								
Oxidation         Abs/.1mm         *ASTM D7414         >25         15.6             Base Number (BN)         mg KOH/g         ASTM D2896         10.1         6.6			• •		1400			
Base Number (BN)   mg KOH/g   ASTM D2896   10.1   6.6					. 05			
VISC @ 100 C CSL ASTM D445 11.1 11.2								
		V130 @ 100 0	COL	AO INI D440	11.1	11.2		







Laboratory Sample No.

Lab Number : 06102383 Unique Number : 10900613

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : RPL0014379

**Tested** Diagnosed

Received

: 27 Feb 2024

: 29 Feb 2024

: 29 Feb 2024 - Sean Felton

Test Package : FLEET ( Additional Tests: Glycol )

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

To discuss this sample report, contact Customer Service at 1-800-237-1369.

RTL PACLEASE - 7001 - Houston

6300 N. Loop East Houston, TX US 77026

Contact: RODNEY BRIGGS briggsr@rushenterprises.com

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