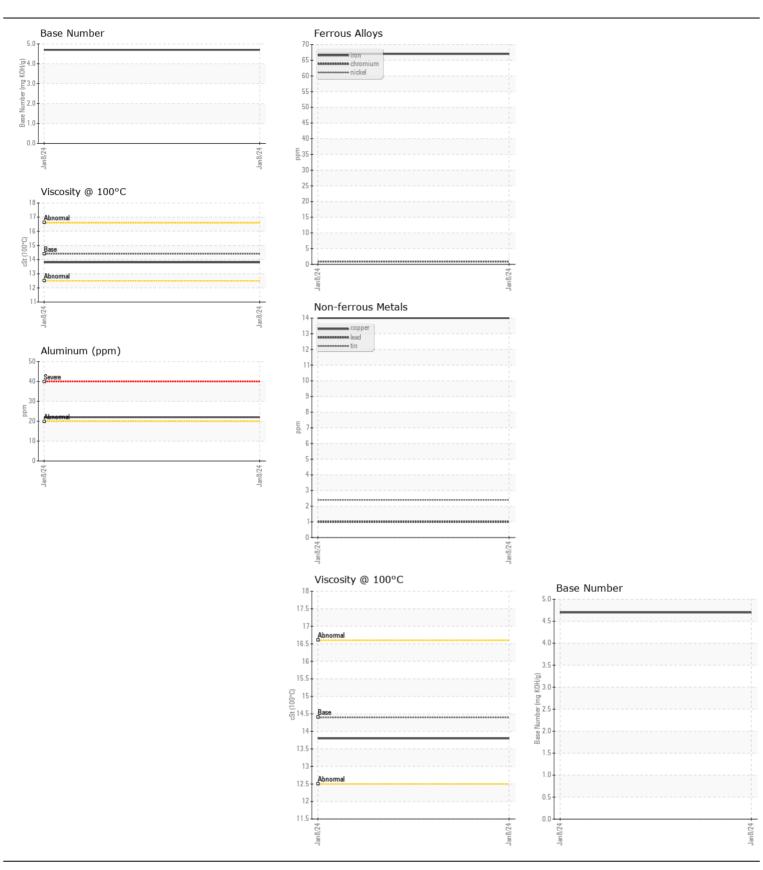


WEAR CONTAMINATION **FLUID CONDITION** NORMAL **NORMAL NORMAL**

Machine Id **8271002**

Test	Component Diesel Engine							
Test	Fluid							
Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Sample Date Client Info 0 an 204		·					 \	
Resemple at the next service interval to monitor. Please specify the component make and model with your next sample.	RECOMMENDATION		UOM		Limit/Abn		,	
Sample Client Info								
Dil Age mls Cilent Info 0 0			l.					
Filter Age		ū						
Oil Changed Client Info N/A Filter Changed Sample Status N/A N/A N/A Sample Status N/A N/A N/A Sample Stat								
Filter Changed Sample Status		J	mls					
NORMAL N								
Tron		•		Client Info				
Chromium ppm ASTM D5185m >20 <1 Nickel ppm ASTM D5185m >4 1 Titanium ppm ASTM D5185m >4 1 Silver ppm ASTM D5185m >4 1 Silver ppm ASTM D5185m >20 22 Aluminum ppm ASTM D5185m >20 22 Lead ppm ASTM D5185m >20 22 Lead ppm ASTM D5185m >30 14 Tin ppm ASTM D5185m >50 0 Visual NONE NONE Tin ppm ASTM D5185m >20 57 Tin ppm ASTM D5185m >20 20 Tin ppm ASTM D5185m >20 20 Tin ppm ASTM D5185m >20 20		Sample Status				NORMAL		
Chromium ppm ASTM D5185m 20 41 Nickel ppm ASTM D5185m 20 41 Titanium ppm ASTM D5185m 20 41 Silver ppm ASTM D5185m 20 22 Aluminum ppm ASTM D5185m 20 22 Aluminum ppm ASTM D5185m 20 22 Lead ppm ASTM D5185m 20 22 Lead ppm ASTM D5185m 20 22 Lead ppm ASTM D5185m 51 2 Vanadium ppm ASTM D5185m 515 2 Visual NONE NONE ASTM D5185m 20 57 Visual NONE NONE Visual NONE NONE ASTM D5185m 20 57 Visual NONE NONE Visual NONE NONE ASTM D5185m 20 29 ASTM D5185m 20 20 20 20 20 ASTM D5185m 20 2	WEAR	Iron	ppm	ASTM D5185m	>100	67		
Nickel ppm ASTM 05185m >4 1		Chromium		ASTM D5185m	>20			
Titanium ppm ASTM DS185m <1 Silver ppm ASTM DS185m <2 ASTM DS185m >3 <1 ASTM DS185m >40 1 Copper ppm ASTM DS185m >40 1 Vanadium ppm ASTM DS185m >30 14 Vanadium ppm ASTM DS185m >15 2 Vanadium ppm ASTM DS185m >15 2 Vanadium ppm ASTM DS185m >2 2 Vanadium ppm ASTM DS185m >3 2 Vanadium ppm ASTM DS185m >5 0 Vanadium ppm ASTM DS185m >5 0 Vanadium ppm ASTM DS185m >5 0 Vanadium ppm ASTM DS185m 2 Vanadium	All component wear rates are normal.							
Silver ppm ASTM D6185m >3 <1								
Aluminum ppm ASTM D5185m >20 22 Lead ppm ASTM D5185m >30 14 Tin ppm ASTM D5185m >15 2 White Metal scalar *Visual NONE NONE Yellow Metal Scalar *Visu					>3			
Lead								
Copper								
Tin								
Vanadium ppm ASTM D5185m 0		• •						
White Metal Yellow Metal Scalar *Visual NONE					7.0			
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. Visual					NONE	-		
Silicon ppm ASTM D5185m >25 22								
Potassium ppm ASTM D5185m >20 57 FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. Potassium ppm ASTM D5185m >20 57 WC Method >5 <1.0 WC Method >0.2 NEG WC Method NEG Mitration Abs/cm *ASTM D7844 >3 0.7 Nitration Abs/cm *ASTM D7844 >3 0.7 Nitration Abs/cm *ASTM D7844 >3 0.7 NEG Sulfation Abs/cmm *ASTM D7844 >3 0.7 NEG Sulfation Abs/cmm *ASTM D7844 >3 0.7 NEG Sulfation Abs/cmm *ASTM D7844 >3 0.7 Sulfation Abs/cmm *ASTM D7844 >3 0.7 NEG Sulfation Abs/cmm *ASTM D7844 >3 0.7 NEG		· · · · · · · · · · · · · · · · · · ·		v 150aa1				
Potassium ppm ASTM D5185m >20 57 FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. Potassium ppm ASTM D5185m >20 57 WC Method >5 <1.0 WC Method >0.2 NEG Material WC Method >0.2 NEG Mate	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	Silicon	ppm	ASTM D5185m	>25	22		
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 Wicklind Solder Wicklind S		Potassium	ppm	ASTM D5185m	>20	57		
Water WC Method NEG Soot NEG Soo		Fuel		WC Method	>5	<1.0		
Sod Sod		Water		WC Method	>0.2	NEG		
Soot %		Glycol		WC Method		NEG		
Sulfation Abs/.tmm *ASTM D7415 >30 29.9		Soot %	%	*ASTM D7844	>3	0.7		
Silt scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NORML NORML Sand/Dirt Scalar *Visual NORML NORML Sand/Dirt Scalar *Visual NORML Scalar *Visual		Nitration	Abs/cm	*ASTM D7624	>20	11.3		
Debris Scalar *Visual NONE NORML NORML		Sulfation	Abs/.1mm	*ASTM D7415	>30	29.9		
Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NOR		Silt	scalar	*Visual	NONE	NONE		
Appearance Scalar *Visual NORML NORM		Debris	scalar	*Visual	NONE	NONE		
Appearance Scalar Visual NORML NORML		Sand/Dirt	scalar	*Visual	NONE	NONE		
Odor Scalar *Visual NORML NORML Emulsified Water Scalar *Visual >0.2 NEG NEG NEG NEG NE		Appearance	scalar	*Visual		NORML		
Sodium ppm ASTM D5185m >50 0		Odor	scalar	*Visual	NORML	NORML		
Boron ppm ASTM D5185m 22 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 75 Manganese ppm ASTM D5185m 2 Magnesium ppm ASTM D5185m 2 Magnesium ppm ASTM D5185m 520 Calcium ppm ASTM D5185m 1543 Phosphorus ppm ASTM D5185m 1310 Sulfur ppm ASTM D5185m 3042		Emulsified Water	scalar	*Visual	>0.2	NEG		
Boron ppm ASTM D5185m 22 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 75 Manganese ppm ASTM D5185m 2 Magnesium ppm ASTM D5185m 520 Calcium ppm ASTM D5185m 1543 Phosphorus ppm ASTM D5185m 885 Zinc ppm ASTM D5185m 1310 Sulfur ppm ASTM D5185m 3042								
Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 75 Manganese ppm ASTM D5185m	FLUID CONDITION		ppm		>50			
oil. The condition of the oil is suitable for further service. Molybdenum ppm ASTM D5185m 75 Manganese ppm ASTM D5185m 2 Magnesium ppm ASTM D5185m 520 Calcium ppm ASTM D5185m 1543 Phosphorus ppm ASTM D5185m 885 Zinc ppm ASTM D5185m 1310 Sulfur ppm ASTM D5185m 3042	,		ppm					
Molybdenum ppm ASTM D5185m 75 Manganese ppm ASTM D5185m 2 Magnesium ppm ASTM D5185m 520 Calcium ppm ASTM D5185m 1543 Phosphorus ppm ASTM D5185m 885 Zinc ppm ASTM D5185m 1310 Sulfur ppm ASTM D5185m 3042			ppm					
Magnesium ppm ASTM D5185m 520 Calcium ppm ASTM D5185m 1543 Phosphorus ppm ASTM D5185m 885 Zinc ppm ASTM D5185m 1310 Sulfur ppm ASTM D5185m 3042		•	ppm					
Calcium ppm ASTM D5185m 1543 Phosphorus ppm ASTM D5185m 885 Zinc ppm ASTM D5185m 1310 Sulfur ppm ASTM D5185m 3042		-	ppm					
Phosphorus ppm ASTM D5185m 885 Zinc ppm ASTM D5185m 1310 Sulfur ppm ASTM D5185m 3042		9	ppm					
Zinc ppm ASTM D5185m 1310 Sulfur ppm ASTM D5185m 3042			ppm					
Sulfur ppm ASTM D5185m 3042		•	ppm					
			ppm					
Oxidation								
					>25			
Base Number (BN) mg KOH/g ASTM D2896 4.7						4.7		
Visc @ 100°C cSt ASTM D445 14.4 13.8		Visc @ 100°C	cSt	ASTM D445	14.4	13.8		







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

: RPL06055311 : 06055311 : 10821260 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 09 Jan 2024 : 10 Jan 2024 Diagnosed

Diagnostician : Wes Davis

RTL PACLEASE - 7019 - Birmingham 601 Republic Circle Birmingham, AL US 35214 Contact: Johnathan King KingJ1@RushEnterprises.com

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) F:

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