WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

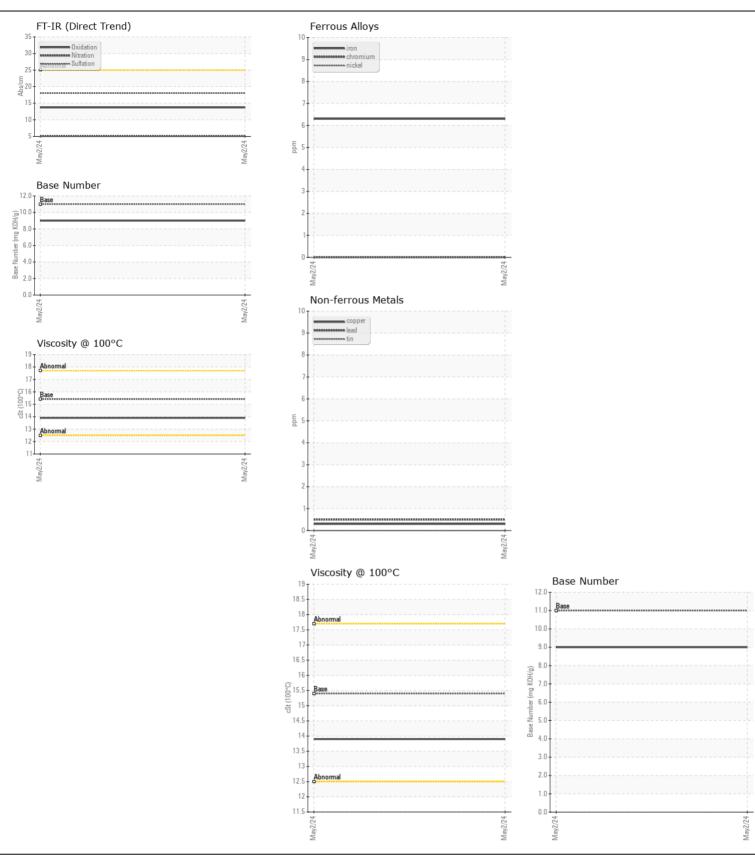
Machine Id

PETERBILT 496358

Diesel Engine

CITGO CITGUARD 600 15W40 (24 QTS)

Test	CITGO CITGUARD 600 15W40 (24 QTS)					.,		
Resample at the next service interval to monitor.	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age mis Client Info 142525		Sample Number		Client Info		RPL0004175		
Oil Age		Sample Date		Client Info		02 May 2024		
Filter Age		Machine Age	mls	Client Info		142525		
Clic Changed Client Info Not Changed Filter Changed Sample Status Client Info Not Changed Not Chan		Oil Age	mls	Client Info		56		
		Filter Age	mls	Client Info		56		
Nome		Oil Changed		Client Info		Not Changd		
Iron		Filter Changed		Client Info		Not Changd		
Chromium ppm ASTMOSISE >20 0 Nickel ppm ASTMOSISE >4 0 Titanium ppm ASTMOSISE >4 0 Auminum ppm ASTMOSISE >0 Auminum ppm ASTMOSISE >0 2 Auminum ppm ASTMOSISE >0 ASTMOSISE >0 ASTMOSISE >0		_				NORMAL		
Chromium ppm ASTMOSISE >20 0 Nickel ppm ASTMOSISE >4 0 Titanium ppm ASTMOSISE >4 0 Auminum ppm ASTMOSISE >0 Auminum ppm ASTMOSISE >0 2 Auminum ppm ASTMOSISE >0 ASTMOSISE >0 ASTMOSISE >0	WEAR	Iron	nnm	ΔQTM D5185m	~100	6		
Nickel ppm ASTM DSISEs 34 0 Titanium ppm ASTM DSISEs 34 0 Silver ppm ASTM DSISEs 34 0 Aluminum ppm ASTM DSISEs 35 0 Aluminum ppm ASTM DSISEs 35 0 Copper ppm ASTM DSISEs 35 0 Copper ppm ASTM DSISEs 35 0 Copper ppm ASTM DSISEs 35 0 Variadium ppm ASTM DSISEs 35 0 Value Visual NONE NONE Fuel Wc Method 55 <1.0 Water Wc Method 0.2 NEG Glycal Wc Method 0.2 NEG Glycal Wc Method 0.2 NEG Sultation Abs/lmm "ASTM DTISEs 0.0 Nitration Abs/lmm "ASTM DTISEs 0.0 Sultation Abs/lmm "ASTM DTISEs 0.0 Debris Scalar Visual NONE NONE Debris Scalar Visual NONE NONE Debris Scalar Visual NONE NONE Debris Scalar Visual NONE NONE	WEAR							
Titanium ppm ASTM DS185m 0	All component wear rates are normal.							
Silver					>4			
Aluminum ppm ASTM D5185m >20 2					0			
Lead ppm ASTM D5185m >-40 < 1								
Copper								
Tin								
Vanadium Vanadium								
White Metal Scalar Visual NONE NON					>15			
Yellow Metal Scalar Visual NONE NONE There is no indication of any contamination in the oil. Silicon ppm ASTM D5185m >25 3 3 Potassium ppm ASTM D5185m >20 4 Water WC Method >5 <1.0 Water WC Method >0.2 NEG Solity WC Method Solity None Neg Solity Nitration Abscim ASSTM D724 >20 5.1 Sulfation Abscim ASSTM D724 >20 Sulfation Abscim ASSTM D724 >20 Sulfation					NONE	-		
Silicon ppm ASTM D5185m >25 3								
Potassium ppm ASTM D5185m 2-20 4 Fuel WC Method 5-5 Water WC Method 5-5 NEG Glycol WC Method NEG NEG Soot % % YaSTM D7844 8-3 0.1 Sulfation Abs/tm YaSTM D7845 8-30 1 Sulfation Abs/tm YaSTM D7845 8-30 1 Sulfation Abs/tm YaSTM D7845 8-30 1 Sulfation Abs/tm YaSTM D7845 8-30 18.0 Codor Scalar Yvisual NONE NONE Appearance Scalar Yvisual NORML NORML Appearance Scalar Yvisual NORML NORML NORML NORML NORML NORML NO		Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium ppm ASTM D5185m 2-20 4 Fuel WC Method 5-5 Water WC Method 5-5 NEG Glycol WC Method NEG NEG Soot % % YaSTM D7844 8-3 0.1 Sulfation Abs/tm YaSTM D7845 8-30 1 Sulfation Abs/tm YaSTM D7845 8-30 1 Sulfation Abs/tm YaSTM D7845 8-30 1 Sulfation Abs/tm YaSTM D7845 8-30 18.0 Codor Scalar Yvisual NONE NONE Appearance Scalar Yvisual NORML NORML Appearance Scalar Yvisual NORML NORML NORML NORML NORML NORML NO	CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	3		
Water		Potassium	ppm	ASTM D5185m	>20	4		
Glycol Soot % % * ASTM D7844 \$-3		Fuel		WC Method	>5	<1.0		
Soot %		Water		WC Method	>0.2	NEG		
Nitration Abs/cm *ASTM D7624 >20 5.1		Glycol		WC Method		NEG		
Sulfation Abs/.tmm ASTM D7415 >30 18.0		Soot %	%	*ASTM D7844	>3	0.1		
Silt Scalar *Visual NONE NORML		Nitration	Abs/cm	*ASTM D7624	>20	5.1		
Debris Scalar *Visual NONE NONE Sand/Dirt Scalar *Visual NONE NONE NONE Sand/Dirt Scalar *Visual NONE NONE NONE Sand/Dirt Scalar *Visual NORML NOR		Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0		
Sand/Dirt Scalar *Visual NONE NONE NONE Appearance Scalar *Visual NORML		Silt	scalar	*Visual	NONE	NONE		
Appearance Scalar *Visual NORML NORML NORML Emulsified Water Scalar *Visual NORML NORML Emulsified Water Scalar *Visual NORML NORML NORML NORML Emulsified Water Scalar *Visual NORML NO		Debris	scalar	*Visual	NONE	NONE		
Codor Emulsified Water Scalar *Visual NORML NORML		Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water scalar *Visual >0.2 NEG		Appearance	scalar	*Visual	NORML	NORML		
Sodium ppm ASTM D5185m 13 0		Odor	scalar	*Visual	NORML	NORML		
Boron ppm ASTM D5185m 13 0 Molybdenum ppm ASTM D5185m 57 53 Magnesium ppm ASTM D5185m 825 393 Calcium ppm ASTM D5185m 1100 1635 Phosphorus ppm ASTM D5185m 933 958 Zinc ppm ASTM D5185m 1089 1226 Sulfur ppm ASTM D5185m 2769 3820 Oxidation Abs/.1mm *ASTM D7144 >25 13.7 Base Number (BN) mg KOH/g ASTM D2896 11.0 9.0		Emulsified Water	scalar	*Visual	>0.2	NEG		
Boron ppm ASTM D5185m 13 0 Molybdenum ppm ASTM D5185m 57 53 Magnesium ppm ASTM D5185m 825 393 Calcium ppm ASTM D5185m 1100 1635 Phosphorus ppm ASTM D5185m 933 958 Zinc ppm ASTM D5185m 1089 1226 Sulfur ppm ASTM D5185m 2769 3820 Oxidation Abs/.1mm *ASTM D7144 >25 13.7 Base Number (BN) mg KOH/g ASTM D2896 11.0 9.0	ELLUD CONDITION	· · · · · · · · · · · · · · · · · · ·		AOTH DE LOS				
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 0 0 Molybdenum ppm ASTM D5185m 57 53 Magnesium ppm ASTM D5185m 825 393 Calcium ppm ASTM D5185m 1100 1635 Phosphorus ppm ASTM D5185m 933 958 Zinc ppm ASTM D5185m 1089 1226 Sulfur ppm ASTM D5185m 2769 3820 Oxidation Abs/.1mm *ASTM D7414 >25 13.7 Base Number (BN) mg KOH/g ASTM D2896 11.0 9.0	FLUID CONDITION				10			
oil. The condition of the oil is suitable for further service. Molybdenum ppm ASTM D5185m 57 53 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 825 393 Calcium ppm ASTM D5185m 1100 1635 Phosphorus ppm ASTM D5185m 933 958 Zinc ppm ASTM D5185m 1089 1226 Sulfur ppm ASTM D5185m 2769 3820 Oxidation Abs/.1mm *ASTM D7414 >25 13.7 Base Number (BN) mg KOH/g ASTM D2896 11.0 9.0								
Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 825 393 Calcium ppm ASTM D5185m 1100 1635 Phosphorus ppm ASTM D5185m 933 958 Zinc ppm ASTM D5185m 1089 1226 Sulfur ppm ASTM D5185m 2769 3820 Oxidation Abs/.1mm *ASTM D7414 >25 13.7 Base Number (BN) mg KOH/g ASTM D2896 11.0 9.0								
Magnesium ppm ASTM D5185m 825 393 Calcium ppm ASTM D5185m 1100 1635 Phosphorus ppm ASTM D5185m 933 958 Zinc ppm ASTM D5185m 1089 1226 Sulfur ppm ASTM D5185m 2769 3820 Oxidation Abs/.1mm *ASTM D7414 >25 13.7 Base Number (BN) mg KOH/g ASTM D2896 11.0 9.0					5/			
Calcium ppm ASTM D5185m 1100 1635 Phosphorus ppm ASTM D5185m 933 958 Zinc ppm ASTM D5185m 1089 1226 Sulfur ppm ASTM D5185m 2769 3820 Oxidation Abs/.1mm *ASTM D7414 >25 13.7 Base Number (BN) mg KOH/g ASTM D2896 11.0 9.0					005			
Phosphorus ppm ASTM D5185m 933 958 Zinc ppm ASTM D5185m 1089 1226 Sulfur ppm ASTM D5185m 2769 3820 Oxidation Abs/.1mm *ASTM D7414 >25 13.7 Base Number (BN) mg KOH/g ASTM D2896 11.0 9.0		•						
Zinc ppm ASTM D5185m 1089 1226 Sulfur ppm ASTM D5185m 2769 3820 Oxidation Abs/.1mm *ASTM D7414 >25 13.7 Base Number (BN) mg KOH/g ASTM D2896 11.0 9.0								
Sulfur ppm ASTM D5185m 2769 3820 Oxidation Abs/.1mm *ASTM D7414 >25 13.7 Base Number (BN) mg KOH/g ASTM D2896 11.0 9.0								
Oxidation Abs/.1mm *ASTM D7414 >25 13.7 Base Number (BN) mg KOH/g ASTM D2896 11.0 9.0								
Base Number (BN) mg KOH/g ASTM D2896 11.0 9.0								
Visc @ 100°C cSt ASIM D445 15.4 13.9								
		visc @ 100°C	cSt	ASTM D445	15.4	13.9		







Certificate L2367

Laboratory Sample No.

: RPL0004175 Lab Number : 06178256 Unique Number : 11029582 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 13 May 2024 **Tested** : 14 May 2024

Diagnosed : 14 May 2024 - Wes Davis

8109 East Adamo Drive

Tampa, FL US 33619 Contact: Michael Reid

REIDM@RushEnterprises.com T: (813)371-2130

RTL PACLEASE - 7025 - Tampa

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)