WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id 178 (S/N 000101)

Component
Diesel Engine

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0034286		
Sample Date		Client Info		03 Jan 2024		
Machine Age	hrs	Client Info		5006		
Oil Age	hrs	Client Info		500		
Filter Age	hrs	Client Info		500		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				NORMAL		
	ppm					
	ppm					
	ppm		>4			
	ppm			-		
	ppm					
Aluminum	ppm			1		
Lead	ppm			1		
	ppm			<1		
	ppm		>15	<1		
	ppm			-		
	scalar					
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	mag	ASTM D5185m	>25	3		
	• •					
	le le · · ·					
		WC Method				
•	%	*ASTM D7844	>3			
Nitration	Abs/cm	*ASTM D7624	>20	6.1		
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.5		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
	ppm			0		
	ppm			1		
Barium	ppm			0		
•	ppm			0		
Manganese	ppm	ASTM D5185m		<1		
_	ppm	ASTM D5185m				
Calcium	ppm	ASTM D5185m		2206		
Phosphorus	ppm	ASTM D5185m		928		
Zinc	ppm	ASTM D5185m		1093		
Sulfur	ppm	ASTM D5185m		3834		
Outdetter	Abs/.1mm	*ASTM D7414	>25	9.0		
Oxidation Base Number (BN)			/20	7.1		
	Sample Date Machine Age Oil Age Filter Age Oil Changed Filter Changed Sample Status Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Yellow Metal Silicon Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	Sample Date Machine Age hrs Oil Age hrs Filter Age hrs Oil Changed Filter Changed Sample Status Iron ppm Chromium ppm Nickel ppm Titanium ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm White Metal scalar Yellow Metal scalar Yellow Metal scalar Silicon ppm Fuel Water Glycol Soot % % Nitration Abs/cm Sulfation Abs/.mm Silt scalar Sand/Dirt scalar Sand/Dirt scalar Sand/Dirt scalar Sand/Dirt scalar Sodium ppm Boron ppm Boron ppm Boron ppm Barium ppm Manganese ppm Magnesium ppm Calcium ppm Calcium ppm Phosphorus Zinc ppm Sulfur ppm Sulfur ppm Sulfur ppm Sulfur ppm Sulfur ppm	Sample Date Machine Age Oil Age hrs Client Info Client Info Oil Age hrs Client Info Client Info Client Info Client Info Oil Changed Filter Changed Sample Status Iron Chromium ppm ASTM D5185m Chromium ppm ASTM D5185m Titanium ppm ASTM D5185m Aluminum ppm ASTM D5185m Lead ppm ASTM D5185m Copper ppm ASTM D5185m Vanadium Vellow Metal Scalar Visual Silicon ppm ASTM D5185m Potassium Potassium Potassium Potassium Pom ASTM D5185m Fuel WC Method Water WC Method Soot % ASTM D5185m Vastm D7624 Sulfation Abs/.1mm ASTM D7625 Sulfation Abs/.1mm ASTM D7626 Salar *Visual Appearance Scalar Avisual Fusual Sodium Appearance Scalar Avisual Appearance Scalar ASTM D5185m Boron ASTM D5185m Barium ASTM D5185m ASTM	Sample Date Machine Age Nrs Client Info Oil Age Nrs Client Info Client Info Filter Age Oil Changed Filter Changed Sample Status Iron Chromium Ppm ASTM D5185m Silver Ppm ASTM D5185m Vanadium Ppm ASTM D5185m Vanadium Ppm ASTM D5185m Vanadium Ppm ASTM D5185m Vanadium Ppm ASTM D5185m Vone Visual NONE Visual NONE Visual NONE Visual Visual NONE Visual Visual NONE Visual NONE Visual NONE Visual NONE Visual NONE Silicon Ppm ASTM D5185m Vanadium Ppm ASTM D5185m S20 Visual NONE Silt Scalar Visual NONE Sulfation Abs/cm Abs/cm ASTM D7624 S20 Sulfation Abs/cm Abs/m Visual NONE Sand/Dirt Scalar Visual NONE Appearance Scalar Visual NONE Sand/Dirt Scalar Visual NONE Sand/Dirt Scalar Visual NONE Sand/Dirt Scalar Visual NONE Sand/Dirt Scalar Visual NONE Appearance Scalar Visual NONE Appearance Scalar Visual NONE Sand/D5185m Boron Ppm ASTM D5185m ASTM D	Sample Date Client Info 03 Jan 2024 Machine Age hrs Client Info 5006 Oil Age hrs Client Info 500 Filter Age hrs Client Info 500 Oil Changed Client Info Changed Filter Changed Client Info Changed Sample Status NORMAL Iron ppm ASTM D5185m >100 Sample Status NORMAL Iron ppm ASTM D5185m >100 Chromium ppm ASTM D5185m >20 0 Nickel ppm ASTM D5185m >20 0 Titanium ppm ASTM D5185m >3 0 Aluminum ppm ASTM D5185m >3 0 Aluminum ppm ASTM D5185m >3 0 Copper ppm ASTM D5185m >3 0 Vanadium ppm ASTM D5185m >3 0 White Metal scalar	Sample Date Machine Age hrs Client Info 5006 Machine Age hrs Client Info 5000 Filter Age hrs Client Info 500 Filter Age hrs Client Info 500 Oil Changed Client Info Changed Filter Changed Changed Filter Changed Changed Filter Changed Changed Filter Changed Changed Filter Changed Changed Filter Changed Changed Filter Changed Changed Filter Changed Changed Filter Changed Changed Filter Changed Changed Filter Changed Changed Filter Changed Changed Filter Changed Changed Filter Changed Changed





Laboratory Sample No. Lab Number

Unique Number

: DC0034286 : 06064918 : 10836300

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 18 Jan 2024 Diagnosed : 19 Jan 2024 Diagnostician : Wes Davis

Test Package : MOB 1 (Additional Tests: TBN)

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.

US 21797 Contact: ANDREW andrew@utilitiesunlimitedinc.com T: (410)591-7955

UTILITIES UNLIMITED INC

612 WEDEKINO DR

WOODBINE, MD

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

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